PUBLIC HEALTH, 1939.

NTS.

Para. Page.

1 1—2

# Annual Report on Public Health in Sind

*For the year 1939*



[Price: Rs. 2-8-0]



KARACHI:

PRINTED AT THE GOVERNMENT PRESS

1941

Copies obtainable from the Manager, Sind Government Book Depot and Record Office, Karachi (Saddar).

# ANNUAL REPORT ON PUBLIC HEALTH, 1939.

## CONTENTS.

### Chapter I.



### Chapter II.



### Chapter III.

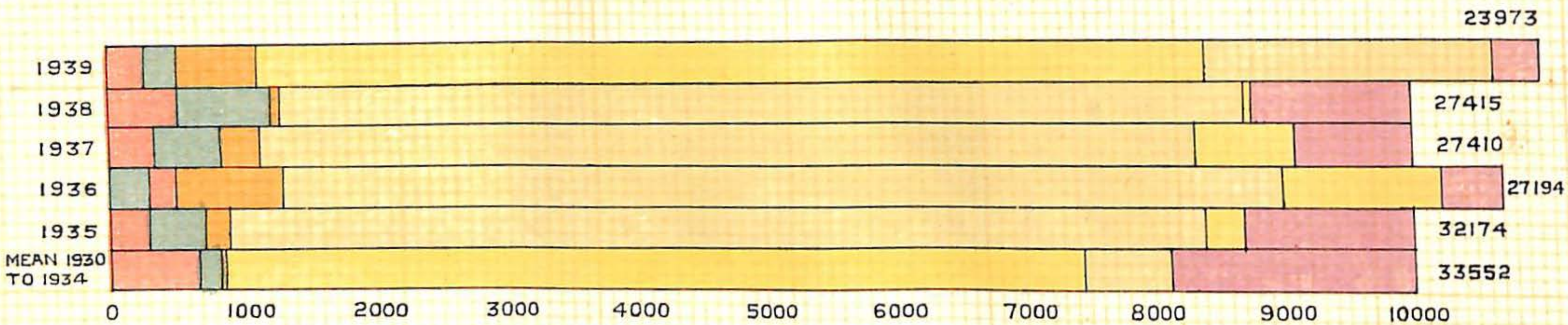


L (IV) 2015—A

L (IV) 2015—B

# CHART I

## DEATHS IN 1939 AND PREVIOUS YEARS




THE ACTUAL DEATHS FROM FEVERS ARE MENTIONED IN FIGURES.

L(IV)2015

G.P.Z.O. POONA, 1941.

Annual Report on Public Health for 1939.

# CHAPTER I.

## METEOROLOGY: ECONOMIC CONDITIONS, *i.e.*, PRICES OF FOOD, GRAINS, ETC.

1. *Rainfall.*—

### (*a*) *The Cold Weather Period—January and February.*

The total rainfall over Sind as a whole was in large defect in January, in large excess in February, and was in large excess taking the cold weather period as a whole. Cloud amount was above normal during the period. Humidity was in defect in January and excess in February. Minimum temperatures were generally above normal during February.

### (*b*) *The Hot Weather Period—March-May.*

Rainfall was, in large excess in March, normal in April and in large defect in May and in large excess taking the hot weather period as a whole. Cloud amount was above normal in March. Humidity was in excess in March and May. Temperatures were below normal throughout the period.

### (*c*) *The South-West Monsoon Period—June-September.*

Actual rainfall during the period was 0.24 showing a percentage departure from the normal of —95. Cloud amount was in excess in June, July and September and maximum temperatures were below normal in June.

### (*d*) *The Retreating Monsoon Period—October-December.*

Weather was generally dry except for light showers in Karachi on the 22nd and 23rd November. Rainfall was in slight defect in November and there was no rain in October and December. Cloud amount was in defect in October and November and in excess in December. Humidity was normal. Both maximum and minimum temperatures were normal in October and above normal in the other two months.

The total rainfall during the year was 3.07" and was 51 per cent. below the average.

2. *Economic Conditions.*—Due to lack of rain during the last monsoon season, cultivation in non-barrage tracts received a set-back, and even in barrage areas crops showed signs of water deficiency. Crop conditions differed in each district. There was a slump in the prices of agricultural commodities but the prices rose on the eve of the outbreak of war. It is yet too early to state how far this has resulted in improving the economic conditions of zamindars. The communal disturbances at Sukkur had an adverse effect on the economic conditions of the people, to whom, however, some relief (in deserving cases) was given in cash, grain, bedding and loans.

In the desert division there was no timely rain and the belated showers that fell at the end of the season were insufficient for the growth of grain crops or natural grass. Cattle died in large numbers and the labour class migrated to Sind for work. Cheap grain and fodder shops were opened at various centres in the desert tract. Liberal taccavi grants were made both for maintenance and agricultural purposes and relief works were started to provide labour for those able bodied persons who remained there.

A large number of famine-stricken people moved into Badin taluka in Hyderabad district, necessitating special relief measures. Cheap grain shops were opened in several villages. The Public Works Department gave free supplies of water for raising pasture in Government waste and occupied lands. The Special Roads Engineer employed some 500 of the men on his road works, while the Railway allowed concessional rates for the transport of fodder.

There were no extensive floods in the Province. In Larkana district there were some floods in Rabi on account of hill torrents on the far side of the Protective Bund in Shahdadkot taluka. Damage to crops was to the extent of six annas in a rupee. There was a break in the Kashmore-Sehwan Bund in Larkana taluka also and a portion of the Bund was eroded. About 250 acres of rice land in Garhi Yasin taluka, Sukkur district, were flooded owing to a breach in the Khirthar Branch Bund. Cultivation did not suffer seriously. Seedlings were lost to a certain extent, but the crops were benefitted eventually by extra water. A few houses only were damaged.



# CHAPTER II.

## VITAL STATISTICS (INCLUDING POPULATION, EMIGRATION AND IMMIGRATION).

1. The Province of Sind comprises 8 Revenue Collectorates (including the City of Karachi). There were 61 Rural Circles (talukas and mahals), 26 Town Circles and 3 Cantonments. These divisions are shown in Appendix III to this report.

2. *Emigration and Immigration.*—The Port of Karachi is declared to be a port from which emigration of skilled labour is lawful. Unskilled labourers do not proceed from this port to any other countries outside India. Skilled workers emigrated mainly to Iran, Bahrein, Iraq, Ceylon, America, Africa, St. Settlements, Japan, China, Phillipine Islands, and Europe, etc.

The bulk of the emigrants registered at the port were recruited by Sind Work Merchants and were mainly drawn from the Province. They proceeded abroad under agreements approved by the Government. The minimum pay permitted must not be less than Rs. 30 per mensem and the maximum is sometimes as much as Rs. 400 per mensem. The health of the emigrants proceeding abroad and those who returned was generally good. The number of emigrants registered was 574 in 1939.

No immigration was reported to have occurred.

3. *Population.*—The birth and death rates are calculated on the population as recorded at the census of 1931. According to this census the population of the province is 38,76,388 and is distributed as follows :—

| | | |
|---|---|---|
| Rural Circles | ... | 31,91,186 |
| Town Circles | ... | 6,72,432 |
| Cantonments | ... | 12,770 |

This population is inclusive of the figures for Europeans and Anglo-Indians. Separate information by localities for these communities is not available.

*Estimated population.*—In accordance with the Government of India's letter, Department of Education, Health and Lands, No. F.-96-43/32-H., dated the 15th August 1932, the estimated population for the year 1939 for the province by Collectorates and

the birth and death rates based thereon are shown in the following table :—

| Name of Collectorate. | Census population 1921. | Census population 1931. | Estimated population 1939 (mid year.) | Birth-rate based on population of 1931. | Birth-rate based on estimated population 1939 (mid year.) | Death-rate based on population of 1931. | Death-rate based on estimated population 1939 (mid year.) |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Karachi .. | ... | 5,79,432 | ... | 32·76 | ... | 16·05 | ... |
| Dadu ... | ... | 3,34,282 | ... | 17·70 | ... | 9·29 | ... |
| Larkana ... | ... | 4,52,141 | ... | 22·88 | ... | 10·97 | ... |
| Upper Sind Frontier. | ... | 2,60,326 | ... | 13·62 | ... | 6·86 | ... |
| Hyderabad ... | 5,73,450 | 6,61,776 | 7,35,376 | 15·20 | 13·68 | 11·08 | 9·09 |
| Nawabshah ... | 4,18,660 | 4,96,612 | 5,61,570 | 14·88 | 13·16 | 9·08 | 8·04 |
| Thar Parkar ... | 3,96,331 | 4,68,040 | 5,27,798 | 20·65 | 18·31 | 14·11 | 12·53 |
| Sukkur ... | 5,10,292 | 6,23,779 | 7,18,454 | 24·10 | 20·92 | 11·52 | 10.01 |
| Total ... | 32,79,377 | 38,76,388 | 43,73,896 | 20·88 | 18·52 | 11·55 | 10·23 |

The estimated population for the first four Collectorates, *viz.*, Karachi, Dadu, Larkana, and Upper Sind Frontier and the birth and death rates calculated thereon could not be worked out on account of the territorial changes that took place in these Collectorates in 1931.

4. *Changes in Area.*—No territorial changes took place during the year under report.

## European and Anglo-Indian Vital Statistics.

Vital statistics figures for Europeans and Anglo-Indians have been included in the Christian group and have been incorporated with those for other communities. This has been done in accordance with the Note by the Public Health Commissioner with the Government of India which has been commended to the Government of Sind by the Government of India in their letter No. F.-45-14(7)-39-H., Department of Education, Health and Lands, dated the 3rd February 1940.



## Vital Statistics.

2. *Births.*—There was a marked increase in the recorded number of live births. The figures for the year under report being 80,946 as against 77,269 in the previous year.

The number of births registered in the past 8 years and the 3 previous decades and the corresponding birth rates were :—

| Years. | | No. of Births. | Birth rate. |
|---|---|---|---|
| 1901-10 (Man) | ... | 66,578 | 20·77 |
| 1911-20 ,, | ... | 71,306 | 20·33 |
| 1921-30 ,, | ... | 73,693 | 22·57 |
| 1931 ... | ... | 88,261 | 22·77 |
| 1932 ... | ... | 77,976 | 20·11 |
| 1933 ... | ... | 77,789 | 20·07 |
| 1934 ... | ... | 75,729 | 19·53 |
| 1935 ... | ... | 78,843 | 20·33 |
| 1936 ... | ... | 79,536 | 20·52 |
| 1937 ... | ... | 77,389 | 19·96 |
| 1938 ... | ... | 77,269 | 19·93 |
| 1939 ... | ... | 80,946 | 20·88 |

3. *Provincial birth rate compared with birth rates of other provinces.*

The birth rate of 20.88 was recorded during the year under review as compared with 19.93 in the previous year.

The birth rate of Sind compared with that of the other provinces in India, is shown in the following table :—

| Province. | | 1938. | 1939. |
|---|---|---|---|
| Madras ... | ... | 38·67 | 38·53 |
| Bengal ... | ... | 30·48 | 33·02 |
| Assam ... | ... | 29·92 | 29·92 |
| Bihar... ... | ... | 34·48 | 33·30 |
| Orissa ... | ... | 33·76 | 34·92 |
| United Provinces | ... | 36·79 | 36·26 |
| Punjab ... | ... | 49·50 | 40·82 |
| Central Provinces | ... | 43·19 | 38·28 |
| Bombay ... | ... | 42·22 | 42·22 |
| North-West Frontier | ... | 30·56 | 30·35 |
| Sind ... ... | ... | 19·93 | 20·88 |

It will be seen from the above figures that as usual the birth-rate is low compared with that of the other Provinces.

4. *Birth rates in Collectorates.*—As usual the highest birth rate was recorded in Karachi district (32.76). This is on account of the inclusion of the figures for the City of Karachi which tends to swell the rate of the district. The next in order was Sukkur district in which a birth rate of 24.10 was registered. The lowest birth rate was recorded in Upper Sind Frontier District (13.62). Of the remaining districts, two returned a birth rate of between 20 and 30 per mille of population and the rest of the three recorded birth rates between 10 and 20.

The details of births and birth rates in Collectorates are shown in Annual Form No. I, Appendix III.

5. *Birth rates in rural areas.*—The number of births during the year under report was 52,994 as against 50,358 in the year 1938 showing an increase of 2,636. The corresponding birth rates were 16.61 and 15.78, respectively, in the years 1939 and 1938.

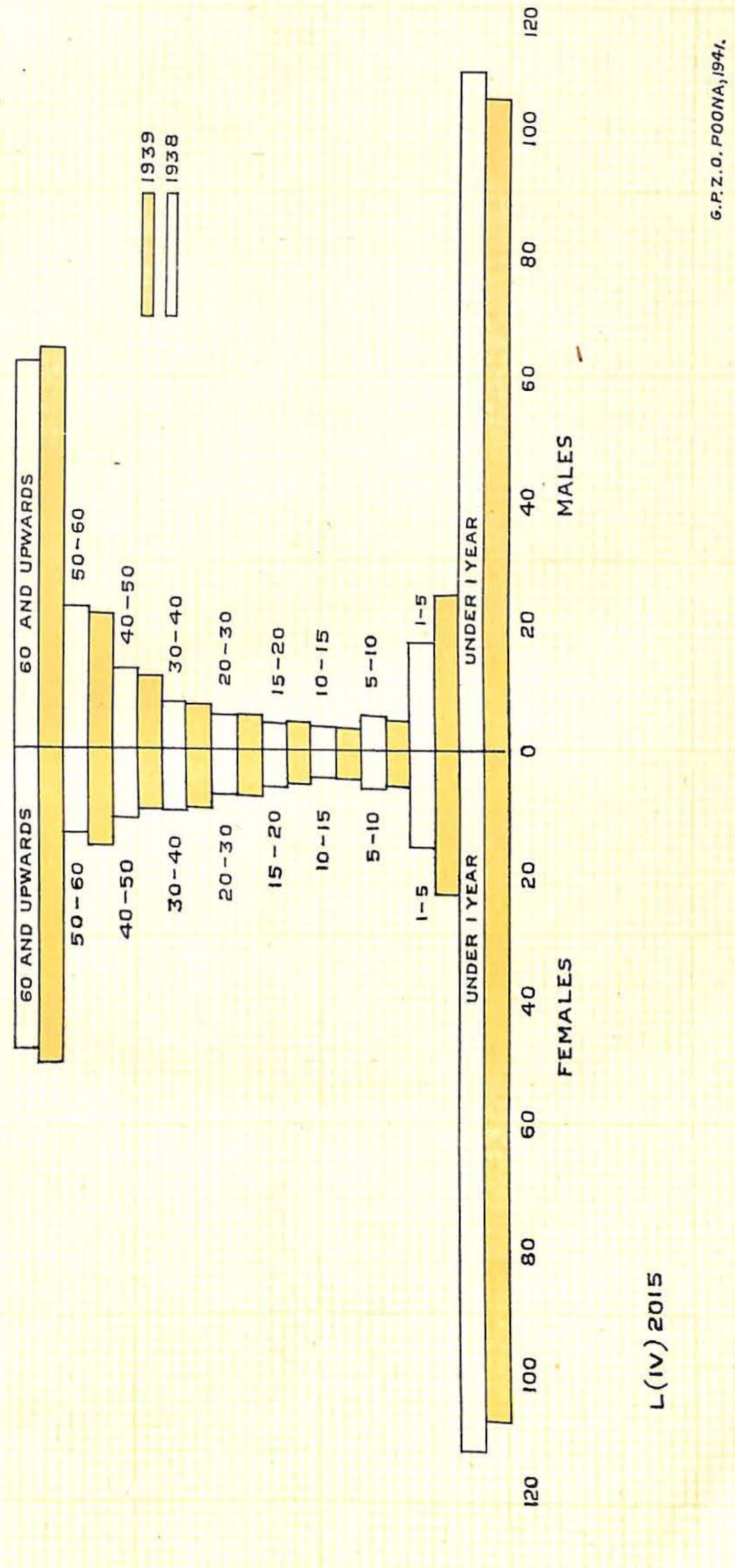
Of the 61 talukas and mahals, one returned a birth rate between 30 and 40 per mille of population, 19 between 20 and 30, 16 between 15 and 20, 17 between 10 and 15 and the remaining under 10. Nagar Parkar taluka in Thar Parkar District recorded the highest birth rate of 32.57 and was followed by Mithi in the same district (28.90). High birth rates were also recorded in Shahdadkot taluka, Larkana district (27.46) and Sukkur taluka, in Sukkur district (27.41). The lowest birth rate was recorded in Tatta taluka, Karachi district (7.46) as was the case in the previous year also.

6. *Births and birth rates in urban areas.*—There was an increase in the number of recorded births in urban areas also. During the year under report 27,952 births were registered as against 26,911 in the previous year, indicating the birth rates of 40.79 and 39.27, respectively.

7. *Births and birth rates in Karachi City.*—The number of births registered in the City of Karachi during the year under review was 14,578 as compared with 14,063 in the preceding year. The birth rates during the years 1939 and 1938 were 58.83 and 56.75, respectively.

CHART II

DEATH RATE AT EACH AGE PERIOD 1939




L(IV) 2015

G.P.Z.O. POONA, 1941.

8. *Births and birth rates in Cantonments.*—This is shown in the following table :—

| Cantonment. | 1939. | | 1938. | |
|---|---|---|---|---|
| | No. of Births. | Birth rate. | No. of Births. | Birth rate. |
| Karachi ... | 373 | 59·77 | 376 | 60·26 |
| Drigh Road ... | 29 | 14·50 | 36 | 18·00 |
| Hyderabad .. | 53 | 11·70 | 47 | 10·38 |

9. *Births according to sex.*—The male and female births numbered 45,091 and 35,855, respectively. The number of males born to every 100 females born was 125.76 as against 128.44 in the previous year.

10. *Still births.*—During the year under report 1,033 still-births were recorded as against 1,071 in the preceding year, the percentage to live births being 1.28 and 1.04, respectively. The percentage ratio of still-births to live-births varied from 0.11 in Thar Parkar district to 2.66 in Karachi district.

Distribution of still-births by Collectorates, class and sex is shown in Annual Form No. I-(a), Appendix III.

11. *Verification of vital statistics.*—There was a great increase in the detection of the number of unrecorded births. These rose from 667 in 1938 to 2,517 in 1939. This is no doubt due to the inspecting staff of the Public Health Department becoming more vigilant.

These omissions were brought to the notice of the Revenue Officers and the Municipal Authorities as the case was for necessary action.

12. *Deaths.*—There was an appreciable decrease in the registered deaths. 44,779 deaths giving a death rate of 11.55 were registered during the year under review as against 48,085 showing a death rate of 12.40 in the previous year. The average number of deaths during the quinquennium ending 1938 was 47,821 indicating a mean ratio of 12.34 (Graph No. I).

The following table shows the number of deaths registered in the previous years :—

| Year. | | Deaths. | Death rate. |
|---|---|---|---|
| 1901-10 (Mean) | ... | 68,335 | 21·62 |
| 1911-20 ,, | ... | 94,320 | 26·89 |
| 1921-30 ,, | ... | 56,174 | 17·23 |
| 1931 ... | ... | 46,714 | 12·05 |
| 1932 ... | ... | 59,067 | 15·23 |
| 1933 ... | ... | 54,239 | 13·99 |
| 1934 ... | ... | 48,489 | 12·51 |
| 1935 ... | ... | 47,249 | 12·19 |
| 1936 ... | .. | 48,425 | 12·49 |
| 1937 ... | ... | 46,860 | 12·09 |
| 1938 ... | ... | 48,085 | 12·40 |
| 1939 ... | ... | 44,779 | 11·55 |

13. *Death rate as compared with those in other Provinces.*—The following table shows the death rates of the various Provinces during the years 1938 and 1939 :—

| Province. | | 1938. | 1939. |
|---|---|---|---|
| Madras ... | ... | 23.46 | 25·26 |
| Bengal ... | ... | 26·36 | 21·85 |
| Assam ... | ... | 22·42 | 22·42 |
| Bihar ... | ... | 23·59 | 23·00 |
| Orissa ... | ... | 29·49 | 28·18 |
| Punjab ... | ... | 26·44 | 20·15 |
| Central Provinces | ... | 41·07 | 31·07 |
| United Provinces | ... | 25·82 | 23·09 |
| Bombay ... | ... | 30·47 | 27·55 |
| North-West Frontier | ... | 22·89 | 18·74 |
| Sind ... | ... | 12·40 | 11·55 |

14. *Death rate in Collectorates.*—The following table shows the death rates recorded in the Collectorates during 1938 and 1939 compared with the quinquennial mean :—

| Collectorates. | Death rate in 1938. | Death rate in 1939. | Quinquennial mean. |
|---|---|---|---|
| Karachi ... ... | 17·07 | 16·05 | 16·20 |
| Hyderabad ... ... | 10·79 | 11·08 | 11·87 |
| Nawabshah ... ... | 10·13 | 9·08 | 10·33 |
| Thar Parkar ... ... | 11·35 | 14·11 | 12·21 |
| Larkana ... ... | 13·07 | 10·97 | 11·86 |
| Dadu ... ... ... | 10·29 | 9·29 | 10·30 |
| Sukkur ... ... | 14·57 | 11·52 | 14·15 |
| Upper Sind Frontier ... | 8·72 | 6·86 | 8·06 |
| Total ... | 12·40 | 11·55 | 12·34 |



15. *Death rates in rural areas.*—The death rate of 9.72 was recorded in rural areas as against 10.46 in the previous year. Of the 61 talukas and mahals, none recorded a death-rate of above 20 per mille of population. 24 returned death-rates between 10 and 20, and the remaining 37 below 10 per mille of population. The highest death rate was recorded in Chachro taluka in Thar Parkar district (19.14) and the lowest in Kandhkot taluka in Upper Sind Frontier district (4.68).

16. *Death rates in urban areas.*—In urban areas, the recorded death-rate was 20.11 as compared with 21.43 in the preceding year. Of the 26 town registration circles, one returned a death-rate of 32.32 per mille, 5 between 20 and 30, 14 between 10 and 20 and the remaining 6 below 10 per mille of population.

17. *Death rates in Cantonments.*—The death rates recorded in the Cantonments were :—

Karachi 17.62; Drigh Road 4.50 and Hyderabad 6.18.

18. *Excess of births over deaths.*—Out of 80,946 births registered during the year, 52,994 births were in rural areas and 27,952 in urban areas. The registered deaths numbered 44,779 of which 30,998 were in rural areas while 13,781 in urban areas. The excess of births over deaths was 36,167 as compared with 29,174 in 1938.

19. *Deaths according to sex.*—The number of deaths recorded among males and females was 25,394 and 19,385, respectively. The corresponding death rates were 11.69 and 11.38, respectively. In the year 1938, 27,225 deaths giving death rate of 12.53 were among males and 20,860 deaths giving a death rate of 12.25 were among females. The number of deaths of males to every 100 deaths of females was 131.00 as against 130.51 in 1938.

20. *Deaths by caste or classes and by sex.*—These are recorded in Annual Form No. V (Appendix III).

21. *Deaths according to cause compared with previous years.*—The causes of deaths recorded in 1939 compared with 1938 and the quinquennial mean are shown in the following table :—

| Causes of deaths. | 1938. | | 1939. | | Mean of 5 years. | |
|---|---|---|---|---|---|---|
| | Deaths. | Death rate. | Deaths. | Death rates. | Deaths. | Deaths rates. |
| Cholera ... ... | 343 | 0·09 | 3 | 0·0008 | 79 | 0·02 |
| Small-pox ... ... | 941 | 0·24 | 565 | 0·15 | 565 | 0·15 |
| Plague ... ... | ... | ... | ... | ... | 4 | 0·001 |
| Fevers ... ... | 27,970 | 7·22 | 23,973 | 6·18 | 28,782 | 7·42 |
| Dysentery and Diarrhoea ... | 1,316 | 0·34 | 1,150 | 0·30 | 1,128 | 0·29 |
| Respiratory diseases ... | 8,759 | 2·26 | 8,444 | 2·18 | 8,827 | 2·28 |
| Injuries ... ... | 850 | 0·22 | 966 | 0·25 | 863 | 0·22 |
| Other causes ... ... | 7,906 | 2·03 | 9,678 | 2·49 | 5,571 | 1·44 |
| Total ... | 48,085 | 12·40 | 44,779 | 11·55 | 47,821 | 12·34 |

Graphs showing the incidence of deaths due to the chief causes for the year under report, compared with the previous years, are shown in Charts I and IV. Graphs showing the annual incidence of deaths due to chief epidemic diseases, *viz.*, cholera, smallpox and plague are shown in Chart No. VII.

22. *Infant mortality*.—The number of deaths among infants under one year of age was 8,560 as compared with 9,375 in the preceding year, the infant mortality rate being 105.75 in 1939 and 121.33 in 1938. The male and female infant mortality rates were 105.30 and 106.32, respectively, as compared with 119.48 and 123.70, respectively, in the preceding year. The distribution of deaths amongst the various age groups under one year and the percentage compared with the corresponding figures of the previous year are shown in the following table :—

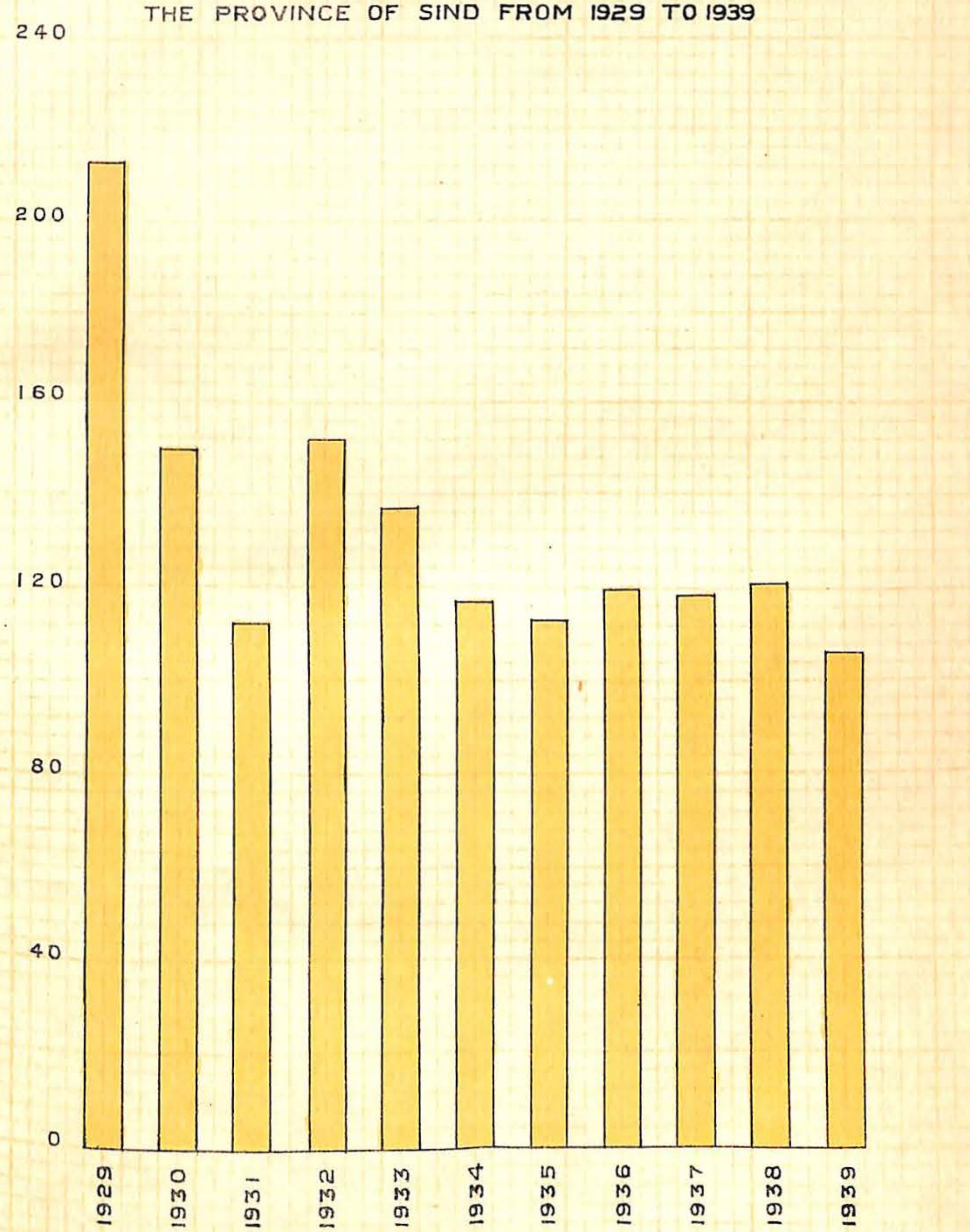
| Age groups. | 1938. | | 1939. | |
|---|---|---|---|---|
| | Total deaths. | Percentage. | Total deaths. | Percentage. |
| Under 1 week ... | 1,898 | 20·26 | 1,784 | 20·84 |
| 1 week to 1 month... | 1,629 | 17·37 | 1,560 | 18·22 |
| 1 to 6 months ... | 3,298 | 35·18 | 3,217 | 37·58 |
| 6 to 12 months ... | 2,550 | 27·20 | 1,999 | 23·35 |

23. *Infant mortality in the Provinces*.—The following table shows the details of the infant mortality rates in the various provinces in British India :—

| Province. | 1938. | 1939. |
|---|---|---|
| Madras ... ... | 160·04 | 175·50 |
| Bengal ... ... | 184·66 | 146·65 |
| United Provinces ... | 146·61 | 139·45 |
| Punjab ... ... | 166·84 | 167·57 |
| Central Provinces ... | 238·20 | 218·62 |
| Bombay... ... | 174·16 | 152·70 |
| Bihar ... ... | 119·86 | 155·3 |
| Orissa ... ... | 221·90 | 197·41 |
| Assam ... ... | 164·67 | 167·64 |
| North-West Frontier. | 154·08 | 130·52 |
| Sind ... ... | 121·33 | 105·75 |

CHART III

CHART SHOWING INFANT MORTALITY RATE IN THE PROVINCE OF SIND FROM 1929 TO 1939




L(IV) 2015

G.P.Z.G. POONA, 1941.

24. *Infant mortality in urban and rural areas.*—The infant mortality rates per 1,000 registered births for urban and rural areas were 138.59 and 88.25, respectively, as against 157.67 and 101.91 in the past year. The infant mortality rate during the year under report compared with that of the previous years is shown in the following table :—

| Year. | Deaths under 12 months. | | | Births registered. | | | Infant death-rate per 1,000 births. | | | Infant deaths per 1,000 of births. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | |
| 1939 ... | 4,768 | 3,812 | 8,560 | 45,091 | 35,855 | 80,946 | 105·30 | 106·32 | 105·75 | 191·16 |
| 1938 ... | 5,191 | 4,184 | 9,375 | 43,415 | 33,824 | 77,269 | 119·48 | 123·70 | 121·33 | 192·88 |
| 1937 ... | 5,024 | 4,110 | 9,134 | 43,095 | 34,291 | 77,389 | 116·57 | 119·85 | 118·02 | 194·92 |
| 1936 ... | 5,227 | 4,422 | 9,649 | 44,175 | 35,361 | 79,536 | 118·32 | 125·05 | 121·31 | 199·26 |
| 1935 ... | 4,917 | 4,023 | 8,940 | 44,024 | 34,819 | 78,843 | 111·69 | 115·54 | 113·01 | 189·21 |
| 1934 ... | 4,776 | 3,938 | 8,760 | 42,012 | 33,717 | 75,729 | 118·77 | 118·10 | 117·67 | 180·66 |
| 1933 ... | 6,019 | 5,060 | 11,079 | 43,639 | 34,150 | 77,789 | 137·01 | 148·11 | 142·42 | 204·26 |
| 1932 ... | 6,509 | 5,407 | 11,916 | 43,432 | 34,544 | 77,976 | 149·61 | 155·66 | 152·82 | 201·73 |
| 1931 ... | 5,381 | 4,476 | 9,857 | 48,800 | 34,961 | 88,261 | 110·27 | 113·43 | 111·68 | 211·01 |
| 1930 ... | 5,664 | 4,690 | 10,354 | 38,374 | 30,892 | 69,266 | 147·60 | 151·82 | 149·48 | 176·24 |
| 1929 ... | 8,889 | 7,897 | 16,786 | 44,744 | 35,394 | 80,138 | 198·66 | 223·12 | 209·46 | 195·49 |
| 1928 ... | 6,401 | 5,144 | 11,555 | 44,968 | 35,354 | 80,322 | 142·57 | 145·49 | 143·85 | 212·76 |
| 1927 ... | 6,308 | 5,361 | 11,669 | 41,616 | 33,577 | 75,193 | 151·58 | 159·63 | 155·19 | 224·71 |

High infant mortality rates were recorded in the following urban areas :—

Nawabshah town 460.99, Garhi Yasin 297.87, Ghotki 266.80, Tando Mahomed Khan 257.58, Tando Allahyar 212.12, Kotri 200.00, Hyderabad 182.40, Shikarpur 179.90 and Nasarpur 161.29.

Among the rural circles, the highest infant mortality rate was recorded in Karachi district (122.75) and the lowest in Dadu district (77.90).

The details of infant mortality rates in urban and rural areas are given in Annual Form No. VI (*a*), Appendix III.

SUMMARY OF VITAL STATISTICS OF THE CHIEF TOWNS.

25. *Karachi City.*—Population 247,791 (1931 Census). There was an increase of 515 in the recorded births during the year under review. The total births numbered 14,578 as compared with 14,063 in the previous year. The birth rates in the years 1938 and 1939 were 56.75 and 58.83, respectively.

There was a fall of 398 in the recorded deaths. The number of deaths recorded in the year under report was 6,247 compared with 6,645 denoting the death rates of 25.21 and 26.82, respectively. The infant mortality rate per 1,000 registered births was 135.68 as against 149.61 in the previous year.

*Hyderabad town.*—Population 96,021 (1931 Census).

The number of births registered in the year 1939 was 4,035 as against 3,831 in the year 1938. The corresponding birth rates during these years were 42.03 and 38.89, respectively. 2,544 deaths giving a death rate of 26.49 were registered during the year under report as compared with 2,493 giving a death rate of 25.96, respectively. The infant mortality rate was 182.40 as against 192.64 in the preceding year.

*Sukkur town.*—Population 69,277 (1931 Census).

The registered births numbered 2,590 giving a birth rate of 37·39 as compared with 2,580 and 37·24 during 1938. There were 847 deaths as compared with 944 deaths in the previous year. The corresponding death rates for the years 1939 and 1938 were 12.24 and 13.63, respectively. The infant mortality rate was 71.43 as against 96.90 in the preceding year.

*Shikarpur town.*—Population 62,505 (1931 Census).

2,179 births giving a birth rate of 34.86 were registered during the year under report as compared with 2,184 births and a birth rate of 34·94 in the preceding year. The number of deaths registered was 1,369 as compared with 1,528 in the last year. The death rates were 21.90 in 1939 and 24.45 in 1938. The infant mortality rate was 179.90 as compared with 219.32 in the previous year.

*Larkana town.*—Population 26,841 (1931 Census).

The registered births numbered 926 being equivalent to a birth rate of 34·50 as compared with an equal number of births and an equal birth rate registered in the previous year. The number of deaths was 439 or a death rate of 16.36 as against 542 or a death rate of 20.19 in the previous year. The infant mortality rate was 105.83 as compared with 156.59 in the previous year.



The principal groups under which deaths were recorded in these towns are shown in the following table :—

| Town. | Cholera. | | | | Small-pox. | | | | Fevers. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1939. | | 1938. | | 1939. | | 1938. | | 1939. | | 1938. | |
| | No. of deaths. | Ratio. | No. of deaths. | Ratio. | No. of deaths. | Ratio. | No. of deaths. | Ratio. | No. of deaths. | Ratio. | No. of deaths. | Ratio. |
| Karachi ... ... | ... | ... | ... | ... | 12 | 0·05 | 18 | 0·07 | 179 | 0·73 | 227 | 0·93 |
| Hyderabad ... ... | ... | ... | ... | ... | 34 | 0·35 | 18 | 0·18 | 401 | 4·17 | 517 | 5·38 |
| Sukkur ... ... | ... | ... | ... | ... | ... | ... | 3 | 0·05 | 118 | 8·50 | 88 | 1·27 |
| Shikarpur ... ... | ... | ... | 4 | 0·06 | ... | ... | ... | ... | 532 | 7·15 | 415 | 6·64 |
| Larkana ... ... | ... | ... | ... | ... | ... | ... | 2 | 0·07 | 166 | 6·19 | 219 | 8·17 |

| Town. | Dysentery and Diarrhoea. | | | | Respiratory Diseases. | | | | All other causes. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1939. | | 1938. | | 1939. | | 1938. | | 1939. | | 1938. | |
| | No. of deaths. | Ratio. | No. of deaths | Ratio. | No. of deaths. | Ratio. | No. of deaths. | Ratio. | No. of deaths. | Ratio. | No. of deaths | Ratio. |
| Karachi ... ... | 628 | 2·53 | 731 | 2·95 | 2,664 | 10·75 | 3,007 | 12·13 | 2,651 | 10·70 | 2,565 | 10·35 |
| Hyderabad ... ... | 61 | 0·64 | 95 | 0·99 | 697 | 7·26 | 761 | 7·93 | 1,297 | 13·51 | 1,053 | 10·97 |
| Sukkur ... ... | 197 | 0·11 | 222 | 3·20 | 255 | 0·72 | 314 | 4·53 | 243 | 2·81 | 293 | 4·23 |
| Shikarpur ... ... | 17 | 0·01 | 19 | 0·30 | 166 | 0·08 | 151 | 2·43 | 613 | 1·56 | 918 | 14·68 |
| Larkana ... ... | 10 | 0·37 | 12 | 0·45 | 94 | 3·54 | 191 | 3·38 | 165 | 6·15 | 211 | 7·86 |

26. *Vital Statistics (General Remarks).*—The Public Health Commissioner with the Government of India in the Annual Report for 1937, remarks " In last year's report, attention was drawn to the recorded rate in Sind which suggested a high degree of error in registration. This year no improvement has taken place, the recorded rate being 11.1 per mille as against 11.5 per mille in 1936." This remark is applicable to-day also as the rate is obviously too low when compared with the rates recorded in other Provinces in India. There has, however, been a slight improvement in the case of registration of births which may partly be due to the vigilance of the inspecting staff who were responsible for detecting not less than 2,517 unrecorded births.

A scheme for the improvement of registration has been submitted to the Government and is receiving their attention.

Birth rates below 10 per mille have been recorded in the following Municipal towns :—

| | | |
|---|---|---|
| Tando Allahyar | ... | 6.41 |
| Nasarpur | ... | 7.27 |
| Shahdadpur | ... | 8.93 |
| Tando Mahomed Khan | ... | 9.96 |

Very low death rates were recorded in the following Municipal towns :—

| | | |
|---|---|---|
| Shahdadpur | ... | 4.87 |
| Jacobabad | ... | 6.10 |
| Sehwan | ... | 6.56 |

Although these Municipalities have passed bye-laws making registration of births and deaths compulsory, it would appear from the recorded rates as indicated above, that practically no efforts have been made to effect improvements in this respect.

The attention of all such Municipalities has been drawn to this fact and they have been asked to take steps in this direction in right earnest.

Conditions are most unsatisfactory in rural areas. Only three districts recorded a birth rate of little over 20 per mille. Except two districts, the rest recorded a death rate of below 10 per mille.

Such a state of affairs is mainly due to the paucity of health staff. Although a new sub-section has been inserted to section 119 of the Bombay District Local Board Act, 1923, making it compulsory for every District Local Board to appoint a Health Officer, yet it is regrettable to note that so far none of the District Local Boards have appointed Health Officers (with the exception of the District Local Board, Larkana, where a Health Officer was appointed 12 years ago).

## CHAPTER III.

### The State of Public Health in the Province and History of Chief Disease.

1. *General Remarks on the Health of the Province.*—The year under review showed an improvement in the general state of health in the Province. There was a marked increase in the number of births recorded and decrease in the number of deaths. As usual the greater number of deaths was recorded under the heading



" Fevers ". Except in the case of deaths due to injuries, the mortality recorded under various heads in the statistical returns appended to this report, showed a decrease as compared with the previous year. The death rate during the year under report was 11.55 as against 12.40 in the previous year. The number of deaths recorded under various groups compared with the previous year and the quinquennium ending 1938 has been shown in paragraph 21 of this report.

For the second year in succession, the City of Karachi enjoyed immunity from plague.

6 cases of, and 3 deaths from cholera were reported to have occurred as against 611 cases and 343 deaths in the preceding year.

There was a decrease in the recorded mortality due to small-pox. The number of deaths reported was 565 as against 941 in the previous year.

During the year only 3 deaths due to Influenza were recorded as compared with 16 deaths in the previous year.

2. *Fevers*: (*General Prevalence*). — As usual " Fevers " accounted for the highest number of deaths among the principal groups under which mortality is recorded, the number of deaths being 23,973 as compared with 27,970 in the previous year, and 28,782 in the past five years ending 1938. The death rate was 6.18 as against 7.22 in the previous year and 7.42 in the past quinquennium.

The percentage of deaths due to fevers to the total deaths was 53.53 as against 58.16 in the previous year. This clearly shows that many of the deaths that may have occurred due to malaria are shown under this head. This is largely due to the lack of public health staff in rural areas. Improvement could, however, be expected with the appointment of the District Health Officers and their staffs.

3. *Fever mortality in the previous years.*—The number of deaths and the death rates due to fevers for the previous ten years are shown in the following table :—

| Year. | No. of deaths. | Death-rate. |
|---|---|---|
| 1929 | 61,581 | 18.89 |
| 1930 | 42,426 | 13.01 |
| 1931 | 31,080 | 8.02 |
| 1932 | 39,728 | 10.25 |
| 1933 | 35,742 | 9.22 |
| 1934 | 32,147 | 8.29 |
| 1935 | 28,713 | 7.41 |
| 1936 | 27,679 | 7.14 |
| 1937 | 27,410 | 7.07 |
| 1938 | 27,970 | 7.22 |
| 1939 | 23,973 | 6.18 |

Distribution of fever deaths is shown in Annual Form No. X (Appendix III).

4. *Death rates from fevers in Collectorates* :—

| Collectorate. | | Death-rate in 1939. | Death-rate in 1938. |
|---|---|---|---|
| Karachi | ... | 2·90 | 3·08 |
| Hyderabad | ... | 5·04 | 5·25 |
| Nawabshah | ... | 6·59 | 7·73 |
| Thar Parkar | ... | 8·27 | 7·29 |
| Larkana | ... | 8·31 | 10·40 |
| Dadu | ... | 6·80 | 8·28 |
| Sukkur | ... | 6·88 | 9·56 |
| Upper Sind Frontier | | 5·72 | 7·78 |

5. *Death rates from fevers in urban and rural areas.*— The death rates for urban and rural areas were 3.66 and 6.73 as compared with 4.11 and 7.89, respectively, in the previous year. The highest death rate was recorded in Ghotki town, Sukkur district (21.13), as was the case in the previous year and the year before that. The other towns in which high death rates were recorded are Manjhand (Dadu district) 15.29, Nawabshah (Nawabshah district) 15.24, Ratodero (Larkana district) 13.73, and Garhi Yasin (Sukkur district) 10.45. The lowest rates were recorded in Karachi (Karachi district) 0.73 and Tatta (Karachi district) 1.14.

In rural areas, the highest death rate was recorded in Chachro (Thar Parkar district) 13.43. High death rates were recorded in the following rural areas :—

Tando Allahyar (Hyderabad district) 11.09, Mithi (Thar Parkar district) 10.15, and Digri (Thar Parkar district) 10.38. The lowest rates were recorded in Ghorabari (Karachi district) 2.83 and Tatta (Karachi district) 2.69.

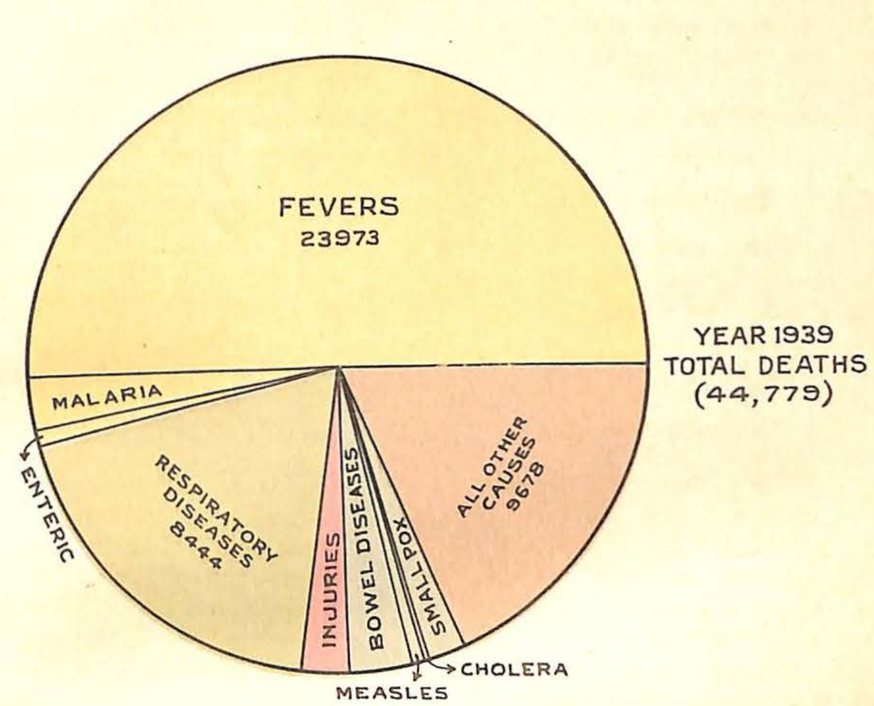
6. *Enteric Fever.*—There was an appreciable decrease in the number of deaths from this cause. During the year under report 312 deaths were reported as against 518 deaths in the previous year giving the death rates of 0.08 and 0.13, respectively, the average death rate for the past five years was 0.10.

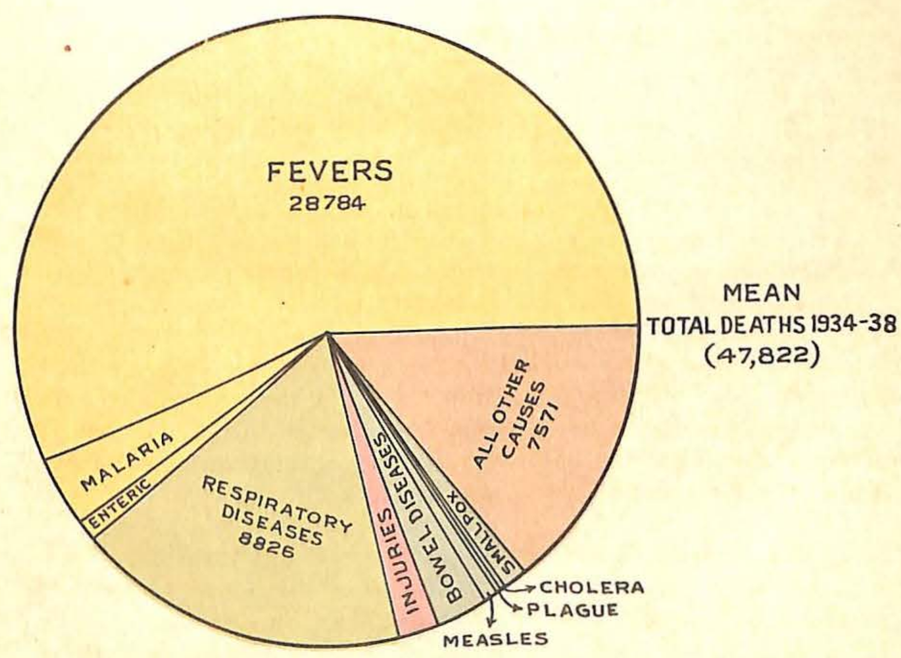
7. *Deaths from enteric fever in urban and rural areas.*—The mortality from this cause in urban and rural areas was 167 and 145, respectively, compared with 250 and 268 in the previous year.

The highest number of deaths was recorded in the City of Karachi (34), the next in order were, Shikarpur (29) and Sukkur (26).

CHART IV

COMPARATIVE DIAGRAMS OF DEATHS BY CAUSES FOR MEAN 1934 - 38 AND 1939.



The highest mortality for rural areas was recorded in Sukkur district (30) as was the case during the last year. The other districts in which high mortality was recorded were Thar Parkar (27), Dadu (25) and Nawabshah (24).

*Karachi City.*—34 deaths against 41 in the previous year were reported from Karachi city. Anti-fly measures were adopted throughout the year, and T.A.B. inoculations offered free of charge in the Municipal dispensaries.

*Hyderabad town.*—9 deaths due to enteric fever were recorded in Hyderabad town during the year under report as compared with 56 in the previous year. Houses of typhoid patients were disinfected.

The number of deaths recorded under this head in other large towns in Sind was as shown below :—

| Town. | 1939. | 1938. |
|---|---|---|
| Sukkur ... ... | 26 | 13 |
| Shikarpur ... ... | 29 | 30 |
| Larkana ... ... | 25 | 45 |
| Tando Adam ... ... | 15 | 10 |

8. *Measles.*—There was a great fall in the mortality from this cause, the number of deaths during the year under report compared with the previous year was 288 and 555, respectively, giving the corresponding death rates of 0.07 and 0.14.

9. *Deaths from measles in urban and rural areas.* — The number of deaths recorded in urban and rural areas was 184 and 104, respectively, as against 242 and 313 in the preceding year. The urban death rate was 0.27 while rural death rate was 0.03 as compared with 0.35 and 0.10 in 1938.

The highest death rates for urban areas were recorded in Manjhand (Dadu district) 2.54, Matiari (Hyderabad district) 1.05, Dadu (Dadu district) 0.76 and Hyderabad (Hyderabad district) 0.72.

The highest number of deaths from measles in rural areas was registered in Dadu district (22). Nawabshah and Karachi were the other districts in which high mortality from this cause was recorded, the relevant figures being 21 and 20, respectively.

10. *Relapsing Fever.*—The Province was entirely free from this disease.

11. *Kala Azar.*—This disease is unknown in this Province.

12. *Typhus Fever.*—This disease is not common in Sind.

13. *Cerebro-spinal fever.*—11 cases and 7 deaths were reported as against 22 cases and 14 deaths in 1938. The case mortality during the year under report was 77.77 as compared with 63.63 in the previous year. The details are as under :—

| Name of Circle. | Attacks. | Deaths. | Date of 1st case. | Date of last case. |
|---|---|---|---|---|
| Karachi ... T. C. ... | 5 | 3 | 19th Feb. 1939. | 28th May 1939. |
| Hyderabad ... T. C. ... | 4 | 3 | 15th Feb. 1939. | 6th May 1939. |
| Jacobabad ... T. C. ... | 1 | ... | 22nd April 1939. | 22nd April 1939. |
| Ubauro ... R. C. ... | 1 | 1 | 24th Dec. 1939. | 24th Dec. 1939. |
| Total ... | 11 | 7 | | |

*Deaths from cerebro-spinal fever in urban and rural areas.*—Only one death was reported from rural area, while the remaining 6 deaths occurred in urban areas. The deaths in urban and rural areas in the previous year were 13 and 1, respectively.

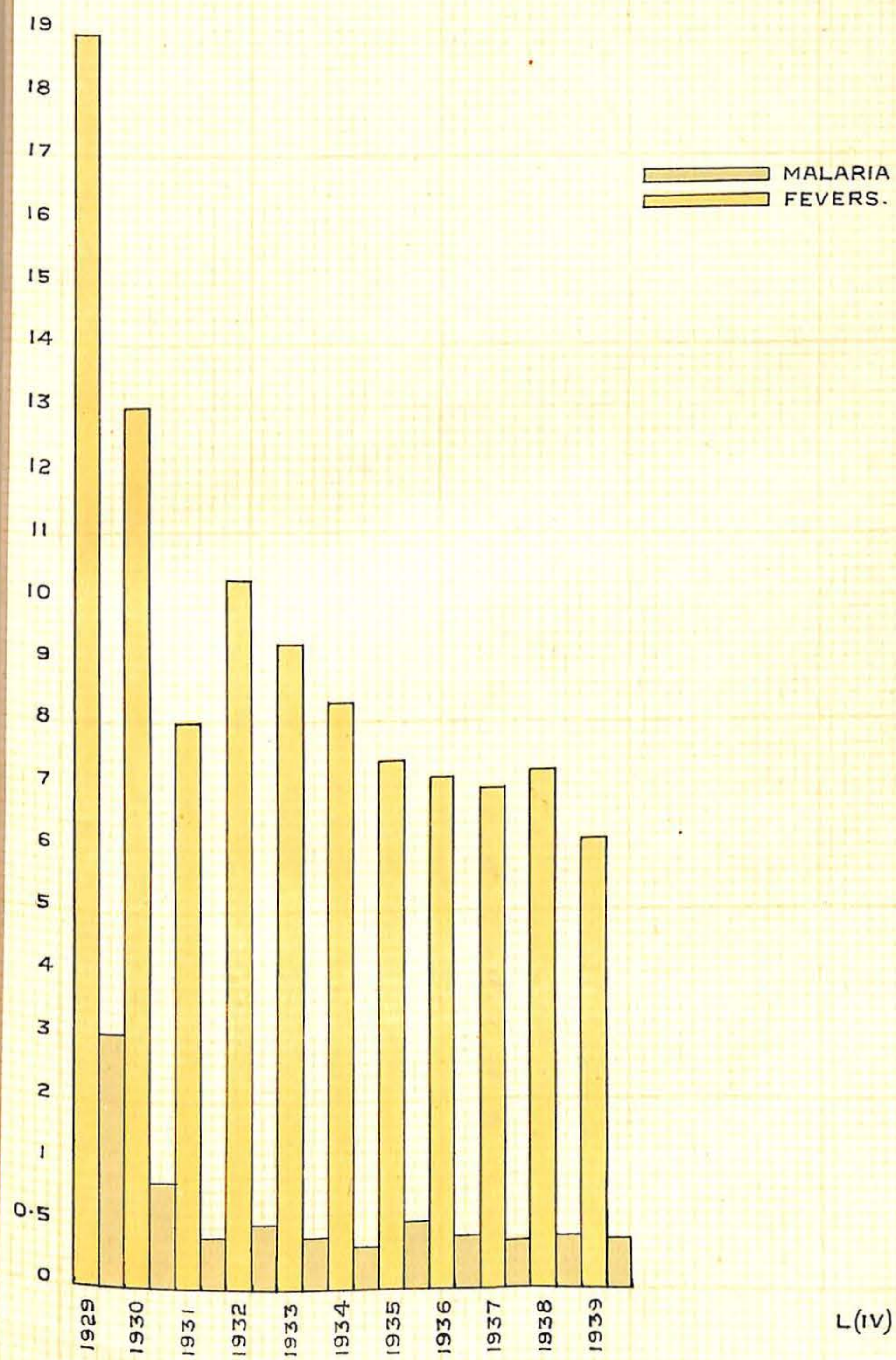
14. *Respiratory Diseases. (General Prevalence).*—During the year under report, there was a further decrease in the mortality under this head. The deaths numbered 8,444 as against 8,759 in the year 1938 and 8,827 the average of the past five years. The death rates in the years 1939 and 1938 compared with the quinquennial mean were 2.18, 2.26 and 2.28, respectively.

15. *Deaths and death rate from Respiratory diseases in the previous years* :—

| Year. | | | No. of deaths. | Death rate. |
|---|---|---|---|---|
| 1929 | ... | ... | 7,355 | 2·26 |
| 1930 | ... | ... | 7,249 | 2·22 |
| 1931 | ... | ... | 6,292 | 1·63 |
| 1932 | ... | ... | 8,149 | 2·10 |
| 1933 | ... | ... | 8,036 | 2·07 |
| 1934 | ... | ... | 7,399 | 1·91 |
| 1935 | ... | ... | 8,654 | 2·23 |
| 1936 | ... | ... | 10,225 | 2·64 |
| 1937 | ... | ... | 9,098 | 2·55 |
| 1938 | ... | ... | 8,444 | 2·18 |

CHART V

SHOWING MORTALITY RATE FROM FEVERS AND MALARIA BY YEARS FROM 1929-1939




L(IV) 2015

G.P.Z.D. POONA, 1941.

16. *Death rates from respiratory diseases in Collectorates* :—

| Collectorate. | 1939. | | 1938. | |
|---|---|---|---|---|
| | No. of deaths. | Ratio per mille. | No. of deaths. | Ratio per mille. |
| Karachi ... | 3,617 | 6·25 | 4,187 | 7·23 |
| Hyderabad ... | 1,772 | 2·68 | 1,822 | 2·75 |
| Nawabshah ... | 391 | 0·79 | 499 | 1·00 |
| Thar Parkar ... | 1,513 | 3·23 | 1,027 | 2·19 |
| Larkana ... | 205 | 0·45 | 210 | 0·46 |
| Dadu ... ... | 227 | 0·67 | 211 | 0·63 |
| Sukkur... ... | 674 | 1·08 | 742 | 1·18 |
| Upper Sind Frontier. | 45 | 0·17 | 61 | 0·23 |

17. *Death rates from respiratory diseases in urban and rural areas.*

The urban death rate continued to be higher than that in rural areas as was the case in the previous year. 4,327 deaths giving a death rate of 6.31 were recorded in urban areas while 4,117 deaths giving a death rate of 1.29 in rural areas were registered. The corresponding figures for the year 1938 were 4,873 or 7.11 and 3,886 or 1.22, respectively, in urban and rural areas.

Karachi city registered the highest death rate from among urban areas (10.75) as was also the case in the preceding year when the death rate was 12.13. Hyderabad and Mirpurkhas were the other towns which recorded high death rates, the relevant rates being 7.26 and 5.39, respectively.

High death rates were recorded in the following rural circles :—

| | | |
|---|---|---|
| Thar Parkar district | ... | 3.16 |
| Karachi district | ... | 2.87 |
| Hyderabad district | ... | 1.84 |

18. *Seasonal mortality of Respiratory diseases.*—As in the last year, this year too the greater number of deaths recorded under this group was in the cold weather months, the month of January being responsible for the highest number, *viz.*, 1,311. The next in order was the month of February which claimed 1,244 deaths. The lowest number of deaths was registered in the month of August (374). The seasonal distribution of deaths from respiratory diseases is shown in Annual Form No. XII (Appendix III).

19. *Phthisis and measures against it.*—Tuberculosis cases are treated at all Government Hospitals and grant-in-aid dispensaries. There is a special ward of four beds at the Civil Hospital, Mirpurkhas, and two beds are reserved at the Rao Bahadur Udhavdas Tarachand Hospital at Shikarpur.

There are Tuberculosis Dispensaries at Karachi and Hyderabad maintained by the Karachi Municipal Corporation and Hyderabad Municipality, respectively. A tuberculosis clinic has been started at the Civil Hospital, Sukkur, where the necessary X-ray Apparatus is available. Other Government Medical Officers in charge of headquarter Hospitals have been directed to make efforts to start anti-tuberculosis measures by opening clinics.

The Government Inspectors of Sanitation and Vaccination also delivered lectures in the schools during the course of their tour. Pictorial posters showing the "Signs and Symptoms", "Causation and Prevention" of tuberculosis were exhibited at several fairs and shows where lectures were also given on the subject for the benefit of the visitors.

The Government of Sind in their Resolution, General Department, No. 690-G.B./37 (III), dated the 23rd October 1938, directed that with effect from the 1st November 1938, arrangements should be made at all Government Hospitals and Dispensaries for the free microscopic examination of sputa, on the recommendation of a Registered Medical Practitioner, of patients suffering or suspected to be suffering from tuberculosis.

The Government considered it necessary to provide such facilities at all dispensaries in the Province. The Revenue Commissioner for Sind was requested to impress upon local bodies the necessity of providing at their own expense a microscope at each of their respective dispensaries, a start being made with those dispensaries which are in charge of such medical officers as are duly qualified to do microscopical examination.

The reports received from the Civil Surgeons and the District Medical Officers show that microscopic examination of sputa of persons suffering or suspected to be suffering from tuberculosis is done only at the Civil or District Hospitals. The local bodies have not provided microscopes in their dispensaries.

Greater number of deaths due to tuberculosis have been recorded in the two important towns of Karachi and Hyderabad. In the former 560 and in the latter 171 deaths were recorded. Thus out of the total 978 deaths recorded in urban areas, 731 deaths were registered in the above two towns indicating thereby that better arrangements in these towns exist in this respect.



In response to an appeal issued by Her Excellency the Marchioness of Linlithgow for the King Emperor's Anti-Tuberculosis Fund, Rs. 58,325 were collected from this Province out of which the Headquarters remitted Rs. 53,423 being 95 per cent. of the total collections and 'The Sind Provincial Tuberculosis Association' was formed on the 16th March 1939 to assume the control and management of the funds. Among the aims and objects of the Association are included :—

(i) The prevention, control, treatment and relief of tuberculosis.

(ii) The establishment, throughout the Province, of District and other Associations having objects similar in whole or in part to those of the Association.

The following are the extracts from the Annual Report of the Association for 1939-40 :—

*Scope of work.*—The Director of Health Services and Inspector-General of Prisons, Sind, and the 2nd Assistant Health Officer and Medical Officer In-charge Municipal Tuberculosis Dispensary, Karachi, were requested to work out a scheme both on the curative and preventive side. The scheme submitted by them is receiving attention of the special sub-committee of the Association.

*Future programme.*—The method of dealing with tuberculosis through clinics has been universally accepted and it is being carried out in many places already with considerable success. To make a start in this direction, the Association has an intention of having tuberculosis clinics in each of the district towns of Sind placed under the charge of a fully trained Tuberculosis Medical Officer along with the District Local Board dispensaries and with this view in end the Committee have sanctioned a grant-in-aid of Rs. 300 towards the expenditure of a Lady Health Visitor for tuberculosis clinic to be attached to the Civil Hospital at Sukkur.

It is gratifying to note that as far as Karachi City is concerned there is a Municipal Tuberculosis Dispensary in charge of a fully qualified medical officer. In addition a Sanatorium at a suitable site at the distance of about 8 miles from Karachi, made possible by the munificent donation of late Mr. Dipchand T. Ojha, is now under construction and on its completion, it will provide one of the much felt needs of the City of Karachi.

20. *Deaths from phthisis by Collectorates* :—

| Collectorate. | | | 1939. | 1938. |
|---|---|---|---|---|
| Karachi | ... | ... | 657 | 634 |
| Hyderabad | ... | ... | 328 | 359 |
| Nawabshah | ... | ... | 68 | 85 |
| Thar Parkar | ... | ... | 130 | 110 |
| Larkana | ... | ... | 45 | 50 |
| Dadu ... | ... | ... | 72 | 64 |
| Sukkur | ... | ... | 154 | 180 |
| Upper Sind Frontier. | | ... | 5 | 14 |
| Total | | ... | 1,459 | 1,496 |

21. *Death rates from phthisis in urban and rural areas.*—The death rates in urban and rural areas were 1.43 and 0.15, respectively, as against 1.49 and 0.15, respectively, in the previous year.

22. *Pneumonia (General Prevalence).*—5,510 deaths giving a death rate of 1.42 were registered as compared with 5,759 or 1.49 in the previous year.

23. *Death rates from pneumonia in urban and rural areas.*—The urban death rate was 3.72 as against 4.45 in the previous year, while the death rate in rural areas was 0.93 as against 0.85 in the last year.

In urban areas high death rates were recorded in the towns of Karachi (6.86), Umarkot (4.69), Hyderabad (4.23) and Mirpurkhas (4.22).

High death rates were recorded in rural areas in the districts of Thar Parkar (2.52) and Karachi (2.31).

1,701 deaths were recorded in the City of Karachi and 406 in Hyderabad town making a total of 2,107 out of 2,551 deaths recorded under this head in urban areas.

24. *Dysentery and Diarrhoea (General Prevalence).* — 1,150 deaths were registered as against 1,316 in the previous year and 1,128 formed the average of the previous five years ending 1938. The corresponding death rates were 0.30, 0.34 and 0.29, respectively.



25. *Death rates from Dysentery and Diarrhoea in the previous years by Collectorates* :—

| Collectorate. | | 1939. | 1929 to 1938 (Mean). |
|---|---|---|---|
| Karachi | ... | 1·12 | 2·09 |
| Hyderabad | ... | 0·14 | 0·42 |
| Nawabshah | ... | 0·03 | 0·11 |
| Thar Parkar | ... | 0·16 | 0·13 |
| Larkana | ... | 0·04 | 0·13 |
| Dadu .. | ... | 0·07 | 0·15 |
| Sukkur .. | ... | 0·42 | 0·53 |
| Upper Sind Frontier. | | 0·03 | 0·07 |

*Dysentery.*—There were 308 deaths giving a death rate of 0.08 as compared with 3.74 and 0.10, respectively, in the previous year.

*Diarrhoea.*—The number of deaths due to this cause was 842 equivalent to a death rate of 0.22 as against 942 and 0.24, respectively, in the preceding year.

26. *Death rates from Dysentery and Diarrhoea in urban and rural areas.*—The urban death rate was 1.42 as compared with 1.67 in 1938, while rural death rate was 0.06 as against 0.05 in the previous year.

High death rates were recorded in the towns of Ghotki (3.31), Sukkur (2.85) and Karachi (2.53).

From among rural areas high death rates were recorded in the districts of Dadu (0.06), Karachi (0.05), Hyderabad (0.05) and Sukkur (0.05).

27. *Injuries.*—966 deaths were recorded under this head as compared with 850 in the previous year. Of these 741 deaths were among males and 225 among females. The number of deaths among males and females in the previous year was 577 and 273, respectively. The average number of deaths due to injuries in the previous five years ending 1938 was 863.

The following are the details of deaths during the previous ten years :—

| Year. | Number of deaths. |
|---|---|
| 1929 | 924 |
| 1930 | 926 |
| 1931 | 838 |
| 1932 | 938 |
| 1933 | 1,004 |
| 1934 | 916 |
| 1935 | 884 |
| 1936 | 873 |
| 1937 | 791 |
| 1938 | 850 |
| 1939 | 966 |

28. *Details of deaths from injuries.*— Further comparisons arranged under the various heads are shown in the following table :—

| Causes. | 1939. | | | 1938. | | |
|---|---|---|---|---|---|---|
| | Male. | Female. | Total. | Male. | Female. | Total. |
| Drowning ... ... | 79 | 39 | 118 | 81 | 45 | 126 |
| Poisoning ... ... | 16 | 3 | 19 | 5 | 3 | 8 |
| Hanging ... ... | 10 | 1 | 11 | 13 | 5 | 18 |
| Wounding ... ... | 391 | 101 | 492 | 199 | 93 | 292 |
| Wild Beasts ... ... | 1 | ... | 1 | 1 | 4 | 5 |
| Snake bites ... ... | 178 | 29 | 207 | 190 | 46 | 236 |
| Rabies ... ... | 11 | 9 | 20 | 14 | 2 | 16 |
| Railway accidents ... | 6 | 1 | 7 | 11 | 5 | 16 |
| Other causes ... ... | 49 | 42 | 91 | 63 | 70 | 133 |
| Total .. | 741 | 225 | 966 | 577 | 273 | 850 |

29. *Deaths from snake bites.*—During the year under report 207 deaths were recorded as against 236 in the previous year. The deaths by Collectorates were :—

| Collectorate. | 1939. | 1938. |
|---|---|---|
| Karachi ... ... | 27 | 31 |
| Hyderabad ... ... | 30 | 53 |
| Nawabshah ... ... | 15 | 37 |
| Thar Parkar ... ... | 43 | 36 |
| Larkana ... .. | 40 | 25 |
| Dadu ... ... | 23 | 17 |
| Sukkur ... ... | 25 | 28 |
| Upper Sind Frontier ... | 4 | 9 |
| Total ... | 207 | 236 |

Anti-venom serum is stocked in all the Government hospitals and grant-in-aid dispensaries.

30. *Deaths from Rabies.*—20 deaths were recorded during the year under report as compared with 16 in the previous year.

Anti-rabic treatment centres have been opened up at all the district head-quarter hospitals and the Rao Bahadur Udhavdas Tarachand Hospital at Shikarpur.



During the year under report 885 persons received anti-rabic treatment at the centres. Cards are issued to the patients on the expiry of their treatment who are required to send these to the medical authorities concerned. Co-operation on the part of the patients is not to the desired effect. The Civil Surgeon, Karachi, writes as under :—

> " No statistics are available regarding the results of anti-rabic treatment as the cards issued to the patients on the expiry of their treatment are not returned and no reply has been received even after issuing reminders except in a very small number of cases all of whom are alright. No cases of rabies come to notice from amongst those who received the prophylactic treatment during the year in question. Until the destruction of stray dogs is systematically undertaken, the present high figure will persist."

31. *Details of suicidal deaths.*—The deaths due to suicide recorded under various heads compared with the previous year are shown in the following table :—

| Causes. | 1939. | | | 1938. | | |
|---|---|---|---|---|---|---|
| | Male. | Female. | Total. | Male. | Female. | Total. |
| Drowning ... ... | ... | ... | ... | ... | ... | ... |
| Poisoning ... ... | 5 | ... | 5 | 1 | ... | 1 |
| Hanging ... ... | 10 | 1 | 11 | 5 | 2 | 7 |
| Wounding ... ... | 8 | 2 | 10 | 2 | 1 | 3 |
| Railway ... ... | ... | ... | ... | ... | 2 | 2 |
| Total ... | 23 | 3 | 26 | 8 | 5 | 13 |

32. *Deaths from other causes.*—Greatest number of deaths are attributable to this cause. The percentage of deaths recorded under this head to the total deaths from all causes comes to 21.61. The number of deaths during the year under report was 9,678 as compared with 7,906 in the previous year and the average of the quinquennium ending 1938 was 7,571. The corresponding death rates were 2.49, 1.95 and 1.44, respectively.

*Deaths from other causes in the past decade were* :—

| Year. | Number of deaths. |
|---|---|
| 1929 | 7,815 |
| 1930 | 6,795 |
| 1931 | 7,123 |
| 1932 | 7,658 |
| 1933 | 7,473 |
| 1934 | 6,886 |
| 1935 | 7,471 |
| 1936 | 8,025 |
| 1937 | 7,568 |
| 1938 | 7,906 |
| 1939 | 9,678 |

33. *Deaths from Child birth.*—During the year under review, the deaths from this cause numbered 950 as compared with 974 in the previous year. The maternal mortality rate was 11.59 as against 12.43 in the previous year.

34. *Deaths from Child birth in the previous years.*—The number of deaths recorded during the previous five years were as under :—

| Year. | Number of deaths. |
|---|---|
| 1934 | 1,027 |
| 1935 | 979 |
| 1936 | 1,023 |
| 1937 | 881 |
| 1938 | 974 |
| 1939 | 950 |

35. *Deaths from Child birth by Collectorates* :—

| Collectorate. | 1939. | 1938. |
|---|---|---|
| Karachi | 145 | 131 |
| Hyderabad | 151 | 148 |
| Nawabshah | 118 | 154 |
| Thar Parkar | 109 | 95 |
| Larkana | 132 | 143 |
| Dadu | 76 | 77 |
| Sukkur | 191 | 207 |
| Upper Sind Frontier | 28 | 19 |
| Total | 950 | 974 |



36. *Deaths from Child birth in urban and rural areas.*—The number of deaths registered in urban and rural areas was 339 and 61, respectively, as against 332 and 642 in the previous year. The maternal mortality rate per 1,000 births for urban and rural areas was 11.85 and 11.47 as compared with 12.82 and 12.51, respectively, in the preceding year. One woman died of child bearing to every 84 live births.

The incidence of maternal mortality in the important towns is shown in the following table :—

| Town. | Total No. of births in 1939. | Total No. of deaths from child birth in 1939. | Total No. of births in 1938. | Total No. of deaths from child birth in 1938. |
|---|---|---|---|---|
| Karachi | 14,578 | 93 | 14,063 | 84 |
| Hyderabad | 4,035 | 52 | 3,831 | 42 |
| Sukkur... | 2,590 | 14 | 2,580 | 23 |
| Shikarpur | 2,179 | 58 | 2,184 | 39 |
| Larkana | 926 | 30 | 926 | 4 |

37. *Diptheria.*—19 deaths giving a death rate of 0.004 were registered during the year under report as compared with 23 deaths or a death rate of 0.006 in the previous year. 15 deaths were recorded in urban areas and the remaining in rural areas.

In rural areas 2 deaths were registered in Larkana district and one death in each of the districts of Hyderabad and Nawabshah.

Out of the 15 deaths in urban areas 12 deaths were recorded in the City of Karachi as was the case in the previous year when out of the total number of 14 deaths in urban areas 13 were registered in the City.

The Medical Officer of Health, Karachi Municipal Corporation writes :—

"173 cases resulting in only 12 deaths were reported from this disease during the year, out of which 167 were admitted in the Epidemic Diseases Hospital, when they were treated with Diphtheria Anti-Toxin.

With a view to preventing the spread of this disease in the City, active immunisation against Diphtheria was carried out amongst school going children and also among children in the vicinity where cases of Diphtheria were reported. In all 3,394 inoculations were performed during the year under report. Further measures adopted to control the infection were to isolate the cases and carriers of Diphtheria bacilli and to immunise the contacts. Throat swabs were taken of the contacts in order to isolate the carriers, disinfection of houses of infected

persons in every case was carried out. Bedding and clothing in every case disinfected with steam under pressure. Samples of milk were taken from various shops particularly from the vicinity where cases of Diphtheria occurred, and were sent to the laboratory but in no case milk was found infected."

38. The number of deaths from chief causes for each Collectorate by months is shown in Annual Form No. VII to XII (Appendix III).

---

## CHAPTER IV.

### Epidemiology.

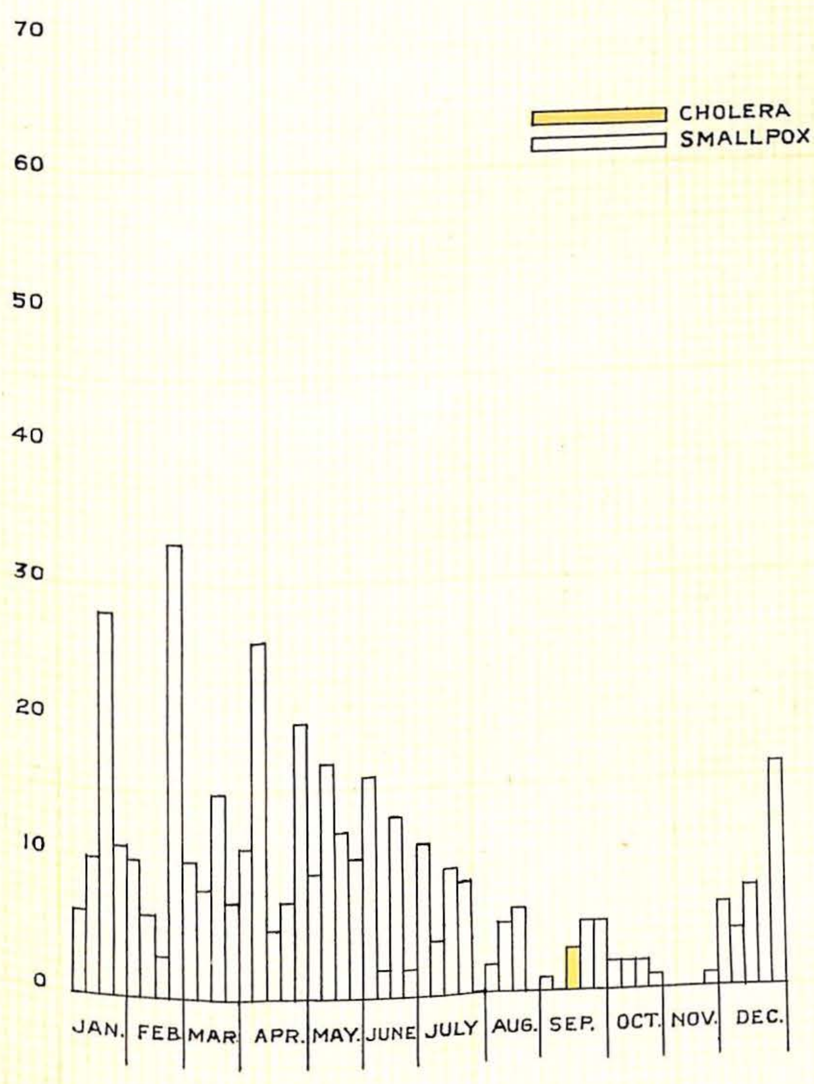
1. *Cholera (General Prevalence).*—During the year under report the prevalence of cholera was restricted to one village in taluka Matli (Hyderabad district). The rest of the Province was free from the disease. In all 6 cases and 3 deaths were reported. The number of cases and deaths reported during the previous year was 611 and 343, respectively. The death rate from the disease for the Province was 0.0008 as against 0.09 in 1938.

2. *Deaths from Cholera in previous years.*—The following table and Chart No. VII show the total number of deaths from cholera from 1918 to 1939.

| Year. | Number of deaths. |
|---|---|
| 1918 | 2 |
| 1919 | 316 |
| 1920 | ... |
| 1921 | 429 |
| 1922 | 25 |
| 1923 | 9 |
| 1924 | 409 |
| 1925 | 1 |
| 1926 | 133 |
| 1927 | 1 |
| 1928 | 214 |
| 1929 | 6,411 |
| 1930 | ... |
| 1931 | 68 |
| 1932 | 15 |
| 1933 | 3 |
| 1934 | 1 |
| 1935 | 44 |
| 1936 | 8 |
| 1937 | 2 |
| 1938 | 343 |
| 1939 | 3 |

## CHART VI

WEEKLY INCIDENCE OF DEATHS FOR EPIDEMIC DISEASES DURING THE YEAR 1939




L(IV) 2015

G.P.Z.O. POONA, 1941.

3. *Deaths from cholera by Collectorates* :—

| Collectorate. | | | 1939. | 1938. |
|---|---|---|---|---|
| Karachi .. | ... | ... | ... | 1 |
| Hyderabad | ... | ... | 3 | 13 |
| Nawabshah | ... | ... | ... | 33 |
| Thar Parkar | ... | ... | ... | 49 |
| Larkana ... | ... | ... | ... | 77 |
| Dadu ... | ... | ... | ... | ... |
| Sukkur ... | .. | ... | ... | 152 |
| Upper Sind Frontier... | | ... | ... | 18 |
| | Total | ... | 3 | 343 |

4. *Deaths from cholera in urban and rural areas.*—All the three deaths occurred in the rural area of Hyderabad district.

5. *Brief history of Cholera.*—On receipt of information about the outbreak of cholera, the Assistant Director of Public Health, Sind, proceeded immediately to the affected area to make personal investigation. A local conference was convened for the purpose. The medical officer who was detailed for cholera duty reported that the origin of the disease could not be traced.

6. All precautionary measures including inoculation with anti-cholera vaccine were taken.

7. *Expenditure on cholera*—

Cost of cholera vaccine ... Rs. 18-0-0.

8. *Smallpox (General Prevalence).*—There was a decrease in the recorded mortality due to smallpox. The number of deaths was 565 as against 941 in the previous year. The death rate was 0.15 as compared with 0.24 in the previous year and quinquennial mean 0.15. The case mortality was 23.33 as against 21.81 in the previous year. The seasonal distribution of smallpox deaths as compared with the previous year was :—

| Month. | | | 1939. | 1938. |
|---|---|---|---|---|
| January ... | ... | ... | 77 | 181 |
| February | ... | ... | 66 | 87 |
| March ... | ... | ... | 63 | 120 |
| April ... | ... | ... | 98 | 132 |
| May ... | ... | ... | 73 | 125 |
| June ... | ... | ... | 43 | 67 |
| July ... | ... | ... | 31 | 51 |
| August ... | ... | ... | 15 | 66 |
| September | ... | ... | 13 | 5 |
| October... | ... | ... | 10 | 25 |
| November | ... | ... | 13 | 46 |
| December | ... | ... | 63 | 36 |
| | Total | ... | 565 | 941 |

9. *Deaths from smallpox in previous years.*—The following table shows the number of deaths and death rates recorded in the years 1929 to 1939. Chart No. VII shows this information in graphic form for the years 1918 to 1939 :—

| Year. | | | No. of deaths. | Death rate. |
|---|---|---|---|---|
| 1929 | ... | ... | 747 | 0·23 |
| 1930 | ... | ... | 509 | 0·16 |
| 1931 | ... | ... | 795 | 0·21 |
| 1932 | ... | ... | 1,553 | 0·40 |
| 1933 | ... | ... | 1,093 | 0·28 |
| 1934 | ... | ... | 209 | 0·05 |
| 1935 | ... | ... | 571 | 0·15 |
| 1936 | ... | ... | 308 | 0·07 |
| 1937 | ... | ... | 798 | 0·21 |
| 1938 | ... | ... | 941 | 0·24 |
| 1939 | ... | ... | 565 | 0·15 |

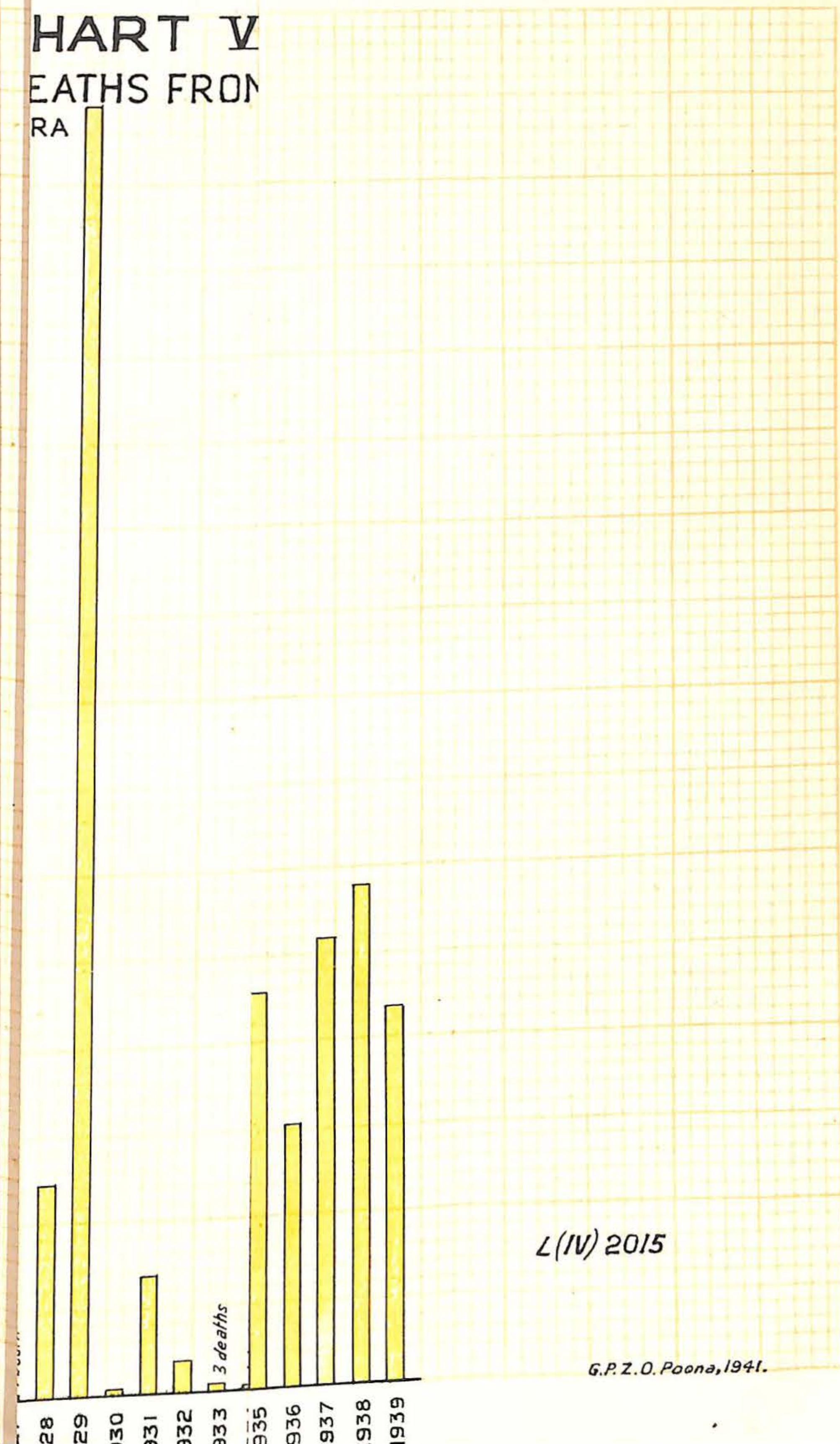
Out of 565 deaths, 52 were amongst infants under 1 year of age and 227 above 1 and under 10 years and the remaining 286 above 10 years.

10. *Deaths from smallpox by Collectorates* :—

| Collectorate. | 1939. | | | 1938. | | |
|---|---|---|---|---|---|---|
| | Cases. | Deaths. | Death rate. | Cases. | Deaths. | Death rate. |
| Karachi ... ... | 235 | 50 | 0·09 | 139 | 26 | 0·05 |
| Hyderabad ... ... | 507 | 128 | 0·19 | 62 | 29 | 0·04 |
| Nawabshah ... ... | 281 | 90 | 0·18 | 561 | 144 | 0·29 |
| Thar Parkar ... ... | 732 | 165 | 0·35 | 1,292 | 210 | 0·45 |
| Larkana ... ... | 303 | 56 | 0·12 | 1,433 | 312 | 0·69 |
| Dadu ... ... | 280 | 67 | 0·20 | 396 | 69 | 0·21 |
| Sukkur ... ... | 65 | 7 | 0·01 | 354 | 113 | 0·18 |
| Upper Sind Frontier ... | 18 | 2 | 0·007 | 86 | 38 | 0·15 |
| Total ... | 2,421 | 565 | 0·15 | 4,314 | 941 | 0·24 |

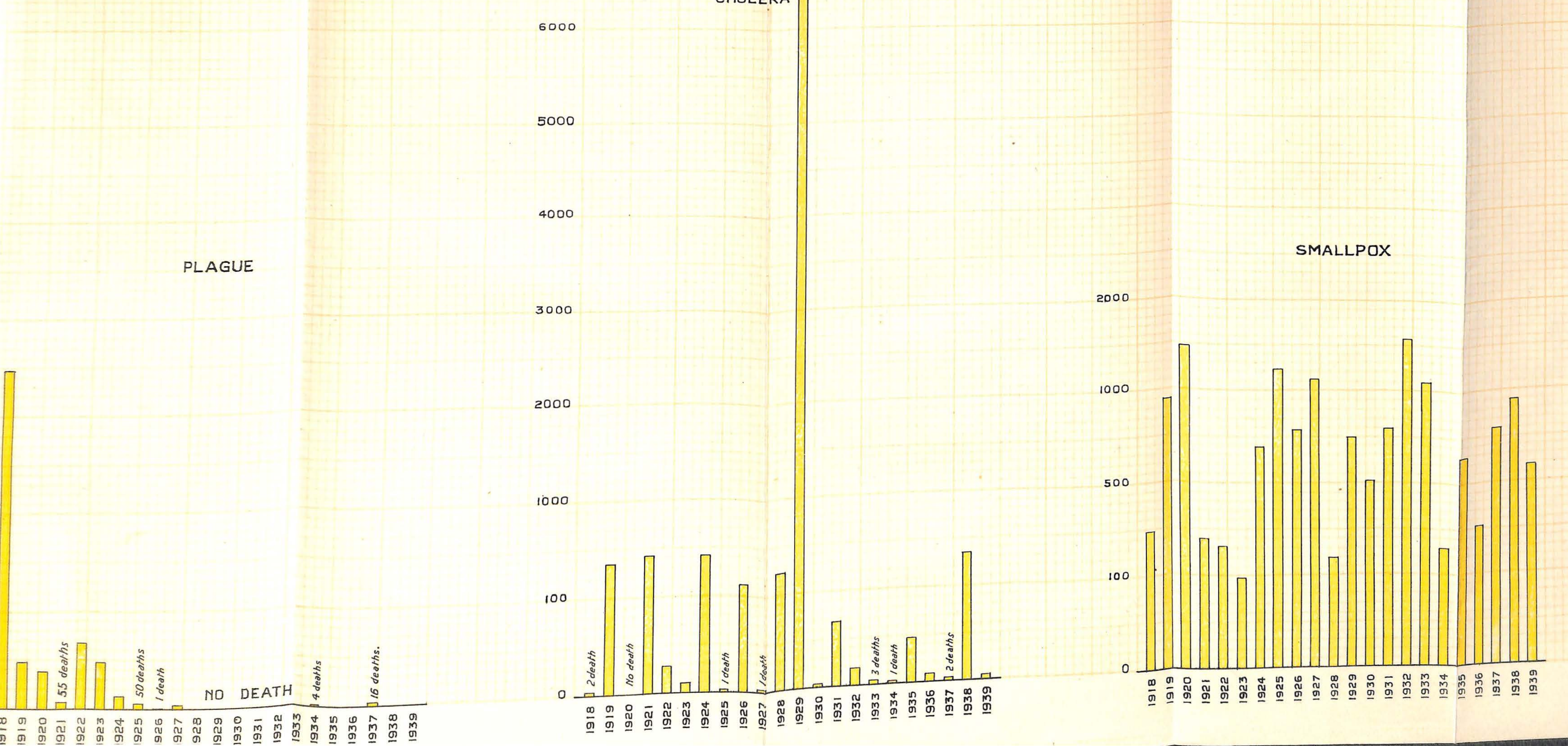
11. *Deaths from smallpox in urban and rural areas.*—131 deaths were recorded in urban areas and 434 in rural areas. The number of deaths registered in urban and rural areas in 1938 was 70 and 871, respectively.

High death rates were recorded in the towns of Tando Adam (3.03) and Mirpurkhas (2.36).



# CHART VII

## ANNUAL INCIDENCE OF DEATHS FROM EPIDEMIC DISEASES




L(IV) 2015

G.P.Z.O. Poona, 1941.

From among rural areas the districts of Thar Parkar and Dadu recorded high death rates, the relevant figures were 0.31 and 0.20, respectively.

12. *Steps taken by the Public Health Department in rural areas.*—As usual, necessary precautions were taken to check the spread of disease. On receipt of the intimation of an outbreak of small-pox in any rural area, the vaccination staff was immediately ordered to carry on vaccination and re-vaccination work vigorously. The Vaccinators were supplied with extra lymph in addition to their regular weekly supplies. In addition temporary Vaccinators as shown below were entertained at the cost of the District Local Boards concerned :—

| District. | No. | Period. | From | To |
|---|---|---|---|---|
| Hyderabad ... | 1 | 5 months. | 14th Feb. 1939. | 13th July 1939. |
| Do. ... | 1 | 2 months. | 1st June 1939. | 31st July 1939. |
| Do. ... | 1 | 4 months and 13 days. | 19th August 1939. | 31st Dec. 1939. |
| Nawabshah ... | 1 | 3 months. | 1st Feb. 1939. | 30th April 1939. |
| Do. ... | 1 | 2 months. | 15th June 1939. | 14th August 1939. |
| Thar Parkar ... | 3 | 6 months. | 1st Jan. 1939. | 30th June 1939. |
| Dadu ... ... | 1 | 5 months. | 2nd Feb. 1939. | 1st June 1939. |
| Do. ... | 1 | 5 months. | 15th Feb. 1939. | 14th June 1939. |

Preserved lymph from Belgaum was indented for and stocked in a refrigerator in the head office. 27,950 doses were supplied to the Vaccinators in addition to their usual supplies.

13. *Vaccinal conditions.*—38 cases of small-pox were admitted to the Municipal Epidemic Diseases Hospital, Karachi, of which 7 proved fatal. Of these 1 was with one vaccination mark, 5 with two marks, 3 with three marks, 1 with four marks, 5 unsuccessfully vaccinated and 23 unvaccinated. Out of the 7 deaths which occurred in the Hospital, 6 were amongst unvaccinated and 1 amongst unsuccessfully vaccinated.

14. *Plague (General Prevalence).*—The Province was completely free from plague during the year under report like the year previous to it.

15. *Deaths from plague in previous years.*—The incidence of mortality due to plague from the year 1918 is shown in Chart No. VII.

16. *Ratting operations.*—Ratting operations were continued throughout the year in the following Municipal towns :—

1. Karachi,
2. Hyderabad.
3. Mirpurkhas.
4. Tando Adam,
5. Sukkur.
6. Shikarpur.

The total number of rats caught in these towns was 174,691. The number of rats examined in Karachi City was 11,167 but none was found to be infected.

17. *Influenza.*—During the year under report only one death was reported as against 16 in the previous year.

18. *Deaths from influenza in previous years.*—The number of deaths due to influenza since its appearance in 1918 is shown below :—

| Year. | Number of deaths. |
|---|---|
| 1918 | 190,217 |
| 1919 | 1,008 |
| 1920 | 552 |
| 1921 | 327 |
| 1922 | 128 |
| 1923 | 37 |
| 1924 | 39 |
| 1925 | 30 |
| 1926 | 20 |
| 1927 | 26 |
| 1928 | 45 |
| 1929 | 12 |
| 1930 | 6 |
| 1931 | 6 |
| 1932 | 3 |
| 1933 | 5 |
| 1934 | 14 |
| 1935 | 18 |
| 1936 | 4 |
| 1937 | ... |
| 1938 | 16 |
| 1939 | 1 |



## CHAPTER V.

1. *Fairs and Festivals.*—The following are the important fairs which took place during the year :—

1. Lal Shahbaz Fair. ... Dadu district.
2. Bhit Shah Fair ... Hyderabad district.
3. Sajan Sawai Fair ... Hyderabad district.
4. Pithoro Fair ... Thar Parkar district.

2. Government Inspectors of Sanitation and Vaccination in whose beats the fairs were held were ordered to supervise the sanitation of the fair areas, inspect the sources of water-supply and treat these with Potassium Permanganate powder and inspect food stuffs.

No case of infectious disease was reported to have occurred from any of the above mentioned pilgrim centres.

3. On account of the prevalence of small-pox in the vicinity of Ghulam Shah, the fair at that place was stopped.

4. The Public Health Commissioner with the Government of India, in his Annual Report for the year 1936, under the heading 'Venereal Diseases' has touched a most important point, *viz.*, the action against prostitution and traffic in women.

So far as the Province of Sind is concerned, there have been no two opinions that of the important factors leading to the incidence of venereal diseases is the presence of prostitutes at the fairs. The Assistant Director of Public Health, Sind, visited the Lal Shahbaz fair and reports as under :—

"This year a large number of prostitutes visited the fair. Some of them were singing and dancing girls. They had constructed kutcha huts in the fair area with openings in the roofs for ventilation purposes. Others had erected tents at some distance outside the municipal limits. The tents for the purpose were hardly spacious enough to accommodate one charpoy and there were absolutely no washing or other sanitary arrangements.

(2) In my opinion the best remedy to eradicate this evil and danger of spread of venereal diseases is to stop this prostitution altogether at fairs."

Enquiries made show that the District Local Boards have framed bye-laws prohibiting prostitution within a radius of 2 miles from the fair area. The Revenue Commissioner for Sind to whom a reference was made on the subject informed that in practice such rules are not observed and it is therefore necessary and he believes practicable, to introduce tighter control in this respect.

With a view to effectively handling the situation, the provisions of the Bombay Prevention of Prostitutes Act, 1923, and the relevant sections of the Police Act are being examined closely. If need be, the Government will be approached to introduce legislation in this respect.

---

## CHAPTER VI.

### URBAN SANITATION (INCLUDING NOTIFIED AREAS).

1. *Number of Medical Officers of Health.*—Municipal Medical Officers of Health having British Diplomas in Public Health have been employed at Karachi, Hyderabad and Sukkur only. The Medical Officer of Health employed at Shikarpur possesses an Indian Diploma. The two municpalities of Sukkur and Shikarpur have employed Medical Officers of Health possessing qualifications necessary for a first class Municipality but allow the scale of pay prescribed by Government for an officer of a second class town. One Assistant Health Officer and one Deputy Health Officer having British Diploma in Public Health have also been employed in the City of Karachi for the Municipal Corporation.

2. *Number of Sanitary Inspectors.*—22 qualified Sanitary Inspectors were employed in the principal towns of the Province, *viz.*, Karachi (8), Hyderabad (4), Shikarpur (3), Sukkur (3), Larkana (1), Rohri (1), Tando Adam (1) and Jacobabad (1). Besides these, qualified Sanitary Inspectors were employed in Nawabshah and Mirpurkhas towns but no Government subsidy was paid in respect of them.

3. With a view to improving the sanitary conditions of the towns by the employment of qualified Sanitary Inspectors, it is proposed to recommend to the Government to revise the policy of the payments of grants-in-aid as laid down in Government Resolution, General Department, No. 8747, dated the 26th March 1936, so that the municipal towns having populations of 10,000 may be declared as 3rd Class towns and be entitled to receive the Government subsidy.

*Municipal Sanitary Works.*—There are in all 26 municipalities including the City of Karachi with a total population of 672,432.

The incidence of Municipal income and taxation per head of population in the larger municipalities was :—

| Name of the town. | Income. Rs. | a. | p. | Taxation. Rs. | a. | p. |
|---|---|---|---|---|---|---|
| Karachi ... | 18 | 2 | 8 | 10 | 8 | 8 |
| Hyderabad ... | 12 | 4 | 3 | 6 | 11 | 11 |
| Sukkur ... | 12 | 4 | 0 | 3 | 14 | 1 |
| Shikarpur ... | 7 | 3 | 9 | 4 | 10 | 8 |
| Larkana ... | 7 | 5 | 8 | 5 | 6 | 4 |



During the year under report, sanitary inspection of 9 towns and 7 Notified and Sanitary Area Committees was made by the Director of Health Services and Inspector-General of Prisons, Sind, and the Assistant Director of Public Health, Sind. In each case a complete report of the inspection was sent to the local authority concerned and advice given with regard to sanitation and public health measures.

It is regrettable that as usual very little attention was paid to the improvements suggested in the inspection notes.

It has been noted that in many of the towns arrangements for the removal, collection and disposal of night soil is very unsatisfactory. There exist private arrangements for the same. The municipalities concerned have been advised from time to time to discourage this and to take over the responsibility and appoint extra sweepers for the purpose. To meet the increased expenditure, it has been suggested to them to levy halalkhore cess. This suggestion has been opposed. It may be stated that by private arrangement every householder pays something to the sweeper who comes to remove the night soil, and it is therefore not understood why the proposal to levy halalkhore cess is opposed.

The Larkana Municipality passed a resolution in June 1939, sanctioning the appointment of a Health Officer. This remained on paper only and no appointment was made during the year.

4. The expenditure on public health measures per head of population came to Rs. 2-7-10 approximately in Karachi City and the average of Rs. 2-2-8 for the remaining municipalities having subsidised health staffs.

5. *Municipal water-supplies.*—During the year under report, the state of water supplies remained the same as described in the Annual Public Health Report for the year 1938.

6. *Infectious Diseases Hospital.*—There is only one such hospital at Karachi maintained by the Municipal Corporation.

It is a matter of surprise that the Hyderabad municipality has taken ten years in simply considering the proposal and deciding on a suitable site for the construction of the Infectious Diseases Hospital. It is absolutely imperative that no time should be lost in the construction of the Hospital.

The municipalities of Sukkur and Shikarpur were advised to construct Infectious Diseases Hospitals. The question is under consideration with the former while the latter turned down the proposal on financial considerations.

7. *Housing conditions in urban areas.*—There were no improvement trusts or other bodies concerned with the improvement of houses in any of the towns in this Province, nor were there any industrial housing schemes. The Karachi Port Trust, the North-Western Railway and the Karachi Municipal Corporation and some of the industrial concerns have provided a number of quarters for their low paid staffs.

There are Co-operative Housing Societies at Karachi and Hyderabad.

The Karachi Municipal Corporation has been following a constant policy of opening up congested areas and improving narrow streets and roads. The Corporation has framed a set of building rules and the construction of buildings is not permitted unless the rules laid down are observed.

---

## CHAPTER VII.

### Rural Sanitation.

1. *District Health Officers.*—There is only one District Health Officer in the Province. He is employed by the District Local Board, Larkana, to whom the Government pay a grant-in-aid to the extent of 2/3rd of his pay. He is not borne on the provincial cadre.

Section 119 of the Bombay District Local Boards Act, 1923, was so amended as to make it compulsory for each District Local Board to appoint a District Health Officer. It is regretted that though this amendment was passed early last year, no appointment was made by the District Local Boards till the end of the year under review.

2. *Land acquisition in villages.*—No land was acquired for the purpose of relieving over-crowding in villages.

3. *Housing conditions in rural areas.*—The housing conditions in rural area are not satisfactory. People usually put up in kacha (mud) huts. Some model huts were constructed but they have made little impression. The villagers are generally apathetic to the adopting of such improvements. There has however been progress in that as far as new villages are concerned, the sites are now sanctioned only after a proper layout is submitted and approved. Settling in the villages according to this layout is made one of the conditions of the grant, and the plan of the houses to be constructed will be subject to the approval of Revenue Officers.



4. *Village Water-supply.*—The work in connection with the improvement of village water supplies is being carried on by the District Revenue authorities as well as through the Rural Reconstruction Department. The latter has concentrated its activities towards sinking tube wells. In accordance with the resolution passed at the Inter-Governmental Conference, Java, the Revenue Commissioner for Sind, distributes the grant in consultation with the Public Health Department.

97 draw wells were newly constructed in the following districts :—

| | |
|---|---|
| Karachi ... ... ... | 4 |
| Nawabshah ... ... ... | 8 |
| Thar Parkar ... ... ... | 66 |
| Dadu ... ... ... ... | 7 |
| Sukkur ... ... ... | 12 |
| Total ... | 97 |

The Special Officer, Rural Reconstruction for Sind, writes that 85 tube wells and 10 draw wells were constructed during the year under report.

5. The expenditure of District Local Boards on public health measures varied from 7 per cent. of their income in Larkana district to 3.64 per cent. in Dadu district.

The average expenditure on public health per head of population varied from Re. 0-1-7 in Larkana district to Re. 0-0-4 in Sukkur district.

6. *Village Sanitary Boards.*—There was one Sanitary Board at Shahpur Chacker, taluka Shahdadpur, district Nawabshah.

7. *Sanitary Committees.*—There were 237 Sanitary and Notified Area Committees in the Province.

---

## CHAPTER VIII.

### Rural Reconstruction.

1. The Government have appointed a Special Officer for Rural Reconstruction work, who is also provided with a Publicity Officer.

2. There were 8 units, one in each district, selected and taken up for intensive Rural Reconstruction work in the Province. Each unit comprised a number of villages within the radius of 5 to 10 miles. A definite programme of work for each unit for a period of 12 months was chalked out by the Special Officer for execution by the District Village Sudhar Committees.

3. The following is a summary of the work done by the Rural Reconstruction Department :—

(1) Free medical aid was provided in the selected centres. The District Local Boards of Thar Parkar, Upper Sind Frontier, Larkana and Dadu each appointed a Medical Officer who was stationed at the central village, and toured frequently in the area selected for rural reconstruction work.

(2) 101 medicine chests were supplied to the school masters or literate villagers who treated the patients for minor ailments common in the moffusil.

(3) Trained dais were appointed in the selected areas of Dadu, Upper Sind Frontier, Hyderabad and Larkana districts.

(4) Almost all the villages in the selected areas were provided with manure and rubbish pits on the outskirts. The streets were levelled and jungle clearance and filling up of depressions and pits in close proximity to the villages were regularly carried out by the villagers.

(5) 85 tube wells and 10 draw wells were constructed.

(6) 220,900 quinine tablets were distributed free.

(7) Wells were treated with potassium permanganate.

(8) In all 64 model houses were constructed solely at Government cost for demonstration purposes in various villages throughout the Province. These were handed over to poor agriculturists for residential purpose. The houses were kept neat and tidy and in some villages the occupants planted fruit and other trees in the coutyards.

(9) The Government were pleased to sanction Rs. 15,000 for the construction of complete model villages, one in each district, on contributory basis. The sites for such villages in Karachi, Nawabshah, Dadu, and Upper Sind Frontier districts were selected. The layout plans for model villages and houses were prepared by the Consulting Surveyor to Government. The work of constructing Model Villages was in hand. These will be provided with drainage system, parks, playgrounds equipped with gymnastic schools and dispensaries.



10. The sweepers for the selected areas were provided by the District Local Boards as under :—

| | | |
|---|---|---|
| Dadu | ... | 2 |
| Sukkur | ... | 4 |
| Thar Parkar | ... | 3 |
| Larkana | ... | 4 |

11. Dust-bins and 'houdies' were provided in the villages in the selected area.

12. Thousands of fruit and other trees and flower plants were planted on the road sides.

13. The District Local Boards fully co-operated in connecting various villages by means of good roads. The villagers themselves constructed about 8 miles road voluntarily in Dadu district.

14. The Government sanctioned an amount of Rs. 3,200 for organising Rural Reconstruction shows.

---

## CHAPTER IX.

### MALARIA.

1. *Incidence.*—Malaria is the disease most prevalent in rural areas. The prevalence of this disease has been accentuated by the enormous increase in the area which has been brought under cultivation after opening of the Lloyd Barrage. The problem of malaria is one of the major problems to be faced in this Province. To effectively control its incidence and spread, the appointment of a malariologist and his staff is a long felt necessity.

During the year under report, 1,546 deaths giving a death rate of 0.40 were recorded as compared with 1,686 and a death rate of 0.43 in the previous year.

Efforts have been made to collect information with regard to the cases of malaria from every available source. This cannot be taken as a true index of the situation as a whole. The number of cases so reported was 236,539 as against 212,262 in the previous year.

From the recorded mortality it would appear that deaths due to this cause are not properly registered and many go to swell the number under the heading " Other Fevers ".

2. *Deaths from malaria in Collectorates* :—

| Collectorate. | | No. of deaths in 1939. | No. of deaths in 1938. |
|---|---|---|---|
| Karachi ... | ... | 122 | 135 |
| Hyderabad ... | ... | 298 | 463 |
| Nawabshah ... | ... | 60 | 80 |
| Thar Parkar ... | ... | 38 | 35 |
| Larkana ... | ... | 180 | 209 |
| Dadu ... | ... | 101 | 88 |
| Sukkur ... | ... | 730 | 657 |
| Upper Sind Frontier | ... | 17 | 19 |
| Total | ... | 1,546 | 1,686 |

3. *Relation of deaths from malaria to deaths from fevers.*—Out of 23,973 deaths due to fevers, 1,546 showing a percentage of 6.45 as compared with 1,686 and a percentage of 6.03 in the previous year were due to malaria.

4. *Seasonal mortality of malaria* :—

| Month. | | | Number of deaths. 1939. | 1938. |
|---|---|---|---|---|
| January | ... | ... | 171 | 154 |
| February | ... | ... | 112 | 111 |
| March... | ... | ... | 114 | 141 |
| April ... | ... | ... | 93 | 118 |
| May ... | ... | ... | 117 | 187 |
| June ... | ... | ... | 112 | 138 |
| July ... | ... | ... | 130 | 114 |
| August | ... | ... | 89 | 108 |
| September | ... | ... | 114 | 137 |
| October | ... | ... | 137 | 173 |
| November | ... | ... | 168 | 140 |
| December | ... | ... | 189 | 165 |
| | Total | ... | 1,546 | 1,686 |



5. *Deaths from malaria in urban and rural areas.*—It cannot be denied that malaria is essentially a rural disease, but it is surprising to note that the recorded mortality is the highest in urban areas. This clearly shows the defective manner in which the figures of mortality are classified. Greater number of deaths occurring due to malaria are registered by the village registrars under the heading "Other Fevers". On account of the paucity of public health staff in rural areas, very little improvement can be expected in this respect.

The number of deaths in urban and rural areas was 1,169 and 377, respectively, corresponding to death rates of 1.71 and 0.12, respectively. The number of deaths registered in the year 1938 in urban areas was 1,254 equivalent to a death rate of 1.83 and 432 giving a death rate of 0.14 in rural areas.

The highest death rate in urban areas was in Ghotki town (8.49) as was the case in the previous year. The other towns in which high death rates were recorded were Shikarpur (7.85), Kotri (5.58), Larkana (5.07) and Hyderabad (2.81).

The highest death rate in rural areas was registered in Karachi district (0.29), same being the case in 1938. The next in order was Sukkur district (0.15). The lowest death rate was recorded in Hyderabad district (0.43).

6. *Anti-malaria measures.*—

*Karachi City.*—The Corporation of the City of Karachi maintains a special establishment of 1 Inspector, 11 Sub-Inspectors, 10 Munshis and 64 Coolies who form the Mosquito Brigade. About 254,308 houses and huts were inspected during the year under report. The cost of the malarial branch was Rs. 26,708.

11 wells were closed during the year and 39 trap door covers over the wells were renewed and thus rendered mosquito proof. Almost all the wells, storage tanks and all such breeding places were periodically examined with a view to detecting the breeding of mosquitoes.

The result of examination of larvae showed that only 0.2 per cent. were anopheles, 26.8 per cent. were Stegomyia and 73.0 per cent. were Culex and other groups.

*Hyderabad town.*—Storm water channels were all cleared up before the rainy season and all stagnant and rain water was pumped from the low lying lands.

The services of an Anti-mosquito Brigade consisting of 2 Jamadars and four sweepers was continued throughout the year. Breeding places of mosquitoes were treated with suitable larvicides.

*Sukkur town.*—Malaria was the most prevalent disease in Sukkur town. During the year under report, 20,985 cases of malaria were treated in the municipal dispensaries.

Searches are made for breeding places of mosquitoes. Crude oil was sprayed every week for 8 months over all collections of stagnant water, 2 per cent. Paris green mixed with lime ash was dusted over the edges of Sukkur Canal.

An anti-malaria brigade consisting of one Sanitary Sub-Inspector and two sweepers is provided. They remove the weeds on the banks of Sukkur Canal and Dubba and take larvicidal measures generally.

50 larvicidal fish were introduced into the Sukkur Canal.

The Vasapur Hollow was reclaimed.

*Larkana town.*—The ponded water in the Old Ghar Canal has been a cause of much concern to the authorities. Realising the necessity of suitably tackling the problem, the Government were pleased to place at the disposal of the Collector of Larkana a sum of Rs. 2,000 to meet expenses in connection with special measures. In the absence of any Government Malaria staff, the Civil Surgeon, Larkana, was requested to personally supervise the operations and render such assistance as may be required by the Collector.

Orders for tools, plants, larvicides, etc., were placed by the Provincial Public Health Department.

As the anti-larval operations were started towards the end of the year, a further report as to the extent and nature of measures adopted and the results achieved would be given in the next year's annual report.

Such measures are bound to fail unless all local authorities carry out similar measures in their own areas.

7. No special anti-larval or anti-mosquito measures were reported to have been carried out by the District Local Boards in the Province.

8. *Government measures.*—(a) *Appointment of Touring Medical Officers.*—Temporary touring medical officers were appointed during the malaria season to tour in rural areas specially in those parts where medical aid, in the ordinary course, is not available. The



touring medical officers were also required to take the spleen index, map out mosquito breeding places, send mosquitoes to the Assistant Director of Public Health, Sind, for identification, send blood smears for examination for malaria parasites and gametocytes and advise the villagers regarding simple preventive measures against malaria and the value of quinine in the treatment of malaria. These medical officers visited 406 villages, treated in all 23,030 patients (11,024 for malaria and 12,006 for other complaints). They also examined the spleens of 11,843 children as well as adults and found 2,429 with enlarged spleens. They also distributed quinine tablets among the villagers.

(b) *The sale of Jail made mosquito nets.*—Improvements have been made on the old pattern. The improved pattern mosquito net costs Rs. 2 each.

(c) The amount of Rs. 33,000 has been sanctioned by the Government for the manufacture of quinine tablets.

(d) The following agencies were employed for the free distribution of quinine tablets on a large scale :—

(1) Officers of the Public Health, Revenue and Educational Departments, (2) Administrative Officers of District School Boards, (3) Philanthropic and Voluntary Societies, (4) Zamindars employing large number of 'haris', (5) The Special Officer for Rural Reconstruction.

During the year under report also opinions were invited from the District Revenue Officers with regard to the policy of free distribution of quinine tablets and it was generally agreed that quinine did reach those for whom it was primarily intended.

(e) Quinine tablets were supplied to Post Offices for cheap sale.

(f) A fishery for the supply of larvivorous fish (Gambussia) was maintained.

(g) Health Bulletin No. 22, " Man made Malaria ", has been translated into Sindhi and distributed free of cost.

(h) Pictorial posters on personal preventive measures against malaria were printed and distributed to the following :—

(1) Medical Department for Hospitals and dispensaries.

(2) Prison Department for Jails and sub-Jails.

(3) North-Western Railway and Jodhpur Railway authorities.

(4) Judicial Department.

(5) Postal Department for sub-post offices.

(6) Education Department for Schools.

(7) Forest Department.

(8) Veterinary Department.

(9) Factories Department for factories.

(10) Public Works Department.

(11) Special Officer, Rural Reconstruction Department.

(12) Police Department for Thanas and out-posts.

(*i*) Leaflets on malaria and on the value of quinine have been printed and distributed.

(*j*) Anti-malaria work was carried on by the staffs of the two Motor Travelling Dispensaries.

(*k*) In all 1,245,681 (5 gr.) and 4,212,678 (2 gr.) quinine sulphate tablets were supplied by the Public Health Department for distribution. In addition 248,650 quinine hydrochloride tablets (5 gr.) each were supplied on payment.

(*l*) During the year under report, information was called for from the agencies to whom the use of Pyrocide '20' as an insecticide was suggested as desired by the Public Health Commissioner. The results obtained have been more encouraging but from some quarters complaints have been received that the cost of the insecticide is prohibitive. It will be interesting to read the following extracts from the replies received from some of the agencies :—

(1) Officer In-charge and Principal, King George V Institute of Agriculture, Sakrand.—The chemical was tried and found to be effective in killing both the mosquitoes and flies. Household pests were also found dead, only a few were living, but almost paralysed. The latter were kept under observation and did not recover.

(2) Messrs. Volkart Brothers.—From the information received from our medical adviser we learn that where as malaria is raging in Mirpurkhas town, cases of malaria amongst our staff members are comparatively less.

From our own experience during the last working season we had very few absentees from the work due to malaria fever and we are satisfied that this is a very large measure due to the regular use of Pyrocide '20'.



(3) *Horticulturist in Sind.*—During the period when Pyrocide was in use, the incidence of malaria was reported to be much less. It is also a very good repellent of flies, wasps, and other domestic pests.

(4) The Civil Surgeon, Hyderabad, and the District Medical Officer, Thar Parkar, reported that Pyrocide '20' was found effective and it did kill mosquitoes and flies.

(5) Pyrocide '20' was used in the Central Prison, Hyderabad, Sind Convict Gang, Hyderabad, and the District Prisons, Karachi and Sukkur. The reports received from the Superintendents show that the method is effective.

(6) Of all these, the most systematic operations seem to have been carried on by the Railway administration. The report received from the Divisional Medical Officer, North-Western Railway, Karachi, is reproduced below :—

"1. The following stations particularly and many others were visited by the Malaria Staff for carrying out anti-malaria operations :—

1. Keamari.
2. Karachi City.
3. Karachi Cantonment.
4. Kotri.
5. Hyderabad.
6. Sukkur.
7. Rohri.
8. Larkana.
9. Dadu.
10. Ruk.
11. Khanpur.
12. Jacobabad.
13. Pad Idan.
14. Drigh Road.

2. The spraying was carried out throughout the year at different intervals. The spraying was done in all the quarters whether menial or superior on all the occasions when these stations were visited by the Malaria Squads.

As a result of these anti-malaria measures having been vigorously carried out this year, the percentage of malaria cases has gone down still further as compared to the figures of the last year as shown in the statement below :—

| Month. | | Number of malaria cases 1938. | 1939. | Decrease. |
|---|---|---|---|---|
| January... | ... | 977 | 644 | 333 |
| February | ... | 607 | 162 | 445 |
| March ... | ... | 556 | 288 | 268 |
| April ... | ... | 951 | 405 | 546 |
| May ... | ... | 937 | 773 | 164 |
| June ... | ... | 567 | 538 | 29 |
| July ... | ... | 507 | 338 | 169 |
| August ... | ... | 547 | 319 | 228 |
| September | ... | 696 | 360 | 336 |
| October | ... | 949 | 486 | 463 |
| November | ... | 1,130 | 581 | 549 |
| December | ... | 768 | 710 | 58 |
| Total | .. | 9,192 | 5,604 | 3,588 |

3. From the reports received from different stations it is noticed that most useful work has been done with a limited amount. In my opinion the money has been spent most usefully resulting in an appreciable reduction in the number of malaria cases on the whole and giving general relief against mosquito nuisance to our employees and their families.

4. On the strength of the most encouraging results of these measures during the last three years, and on the plea that the money thus spent indirectly returns to railway coffers in terms of reduced sickness, I strongly recommend that Rs. 5,000 be provided for the current year for this work on whole of the division. . . . .".

*Public Works Department.*—Pyrocide '20' or Pyrethrum insecticide has been tried and found to be efficacious in killing adult mosquitoes.

9. *Distribution of quinine.*—Government authorised the Director to incur expenditure up to Rs. 1,000 per annum from the allotment for the purchase of magnessium sulphate to be supplied free of charge with quinine tablets.



Quinine tablets are manufactured at the Hyderabad Central Prison under the supervision of a trained member of the staff :—

During the year under report 1,977,905 (5 gr.) and 4,541,000 (2 gr.) quinine sulphate tablets were supplied to various agencies as under :—

| | | |
|---|---|---|
| (1) Quinine sulphate tablets to Post Offices for cheap sale. | 152,252 | (5 grains). |
| (2) Quinine hydrochloride treatment parcels sold to Government departments. | 986½ parcels each containing 200 tablets (5 grains each). | |
| (3) Quinine sulphate tablets sold to local bodies at concessional rates. | 404,305 (5 grains). | 564,928 (2 grains). |
| (4) Quinine hydrochloride treatment parcels sold to local bodies. | 257 parcels each containing 200 tablets (5 grains). | |
| (5) Quinine sulphate tablets for free distribution (Government Officials). | 614,000 (5 grains). | 78,500 (2 grains). |
| (6) Number of quinine sulphate tablets sent to various local bodies for free distribution. | 3,566,000 | (2 grains). |
| (7) Quinine sulphate powder and tablets sold to Government departments. | 75,124 (5 grains). | 3,250 (2 grains). |

10. *Special inquiries and investigations.*—Nil.

## CHAPTER X.

### MATERNITY AND CHILD WELFARE.

1. At present Maternity and Child Welfare services are chiefly organised by voluntary organisations such as the Provincial Branch of the Indian Red Cross Society, Lady Graham Dais' Improvement and Village Uplift Scheme, Hyderabad, Lady Graham Dais' Training School, Sukkur, and the Karachi Health Association. A Maternity and Child Welfare Sub-Committee under the auspices of the Red Cross Society has been set up with the Director of Health Services and Inspector-General of Prisons, Sind, as Chairman.

2. The Lady Graham Dais' Improvement and Village Uplift Scheme, Hyderabad, and the Lady Graham Dais' Training School, Sukkur, are the training centres for dais. Under the auspices of the former classes for Dais were held at the following places :—

Dhoro Naro (Thar Parkar district).

Khipro (Thar Parkar district).

Radhan (Dadu district).

In all 67 dais received instruction. 9 dais appeared for examination and all passed.

There were 19 dais under training in the Lady Graham Red Cross Dais' Training School, Sukkur, in the beginning of 1939. Four dais appeared for examination. All passed and one of them secured Honours.

3. During the year under review the Countess of Dufferin's Fund, Sind Provincial Council (Women's Medical Relief) provided instruments and equipment in Women's Hospitals and Maternity Homes to the value of Rs. 4,340.

4. As a first step towards the eight year plan for the provision of trained maternity services, it was decided to train five candidates in midwifery at the Lady Dufferin and Louise Lawrence Provincial School of Midwifery. The first batch will undergo training in the year 1940-41. The Government were pleased to sanction the award of a scholarship of the value of Rs. 20 per mensem tenable for a period of 12 months to each selected candidate. In order that suitable candidates may be attracted, appointments for successful candidates have been guaranteed. There is however great difficulty in getting suitable Sindhi girls.

5. *Maternity services in urban and rural areas.*—More superior services are available in urban areas than in rural areas. It is only in the latter case that concerted action is very necessary although the provision of the same in many minor towns cannot be neglected. It is however a happy sign that the District Local Boards are also considering the necessity of providing trained maternity services in rural areas.

The extent of maternity and child welfare services in urban and rural areas is shown in Appendix I-A.

In some of the towns, child welfare work is carried on by voluntary associations which in some cases are aided by the municipalities concerned. Very useful work is being done in this respect. The details are as under :—

*Karachi City.*—The number of child welfare centres was 8 of which 6 were Municipal, one conducted by the Red Cross Society and one by the Poor Patients Relief Society. These centres did excellent work. The Health Visitors attached to the Municipal centres visited homes of the people, conducted propaganda and attended to the children who were brought to the centres.



*Hyderabad town.*—As usual the Child Welfare Centre of Fuleli quarter was kept open on all days from 8 a.m. to 12 noon and from 4 p.m. to 6 p.m. A large number of children and infants attended the centre.

*Sukkur town.*—The Municipality pays an annual grant of Rs. 600 to the Red Cross Society, Sukkur, for the maintenance of the Child Welfare Centre.

The Health Visitor visits the homes, gives health talks to mothers on sanitation, cleanliness and infant feeding.

Free milk is distributed to the poor and weak children of the town, irrespective of caste and creed. On an average 50 children were given ½ lb. of milk every day and the total attendance was 763 in 1939. The children taking milk increased in weight.

A statement showing particulars of deaths due directly to child bearing and compiled under the headings of the International List (1929) for the municipal towns employing qualified Health Officers is given below :—

| Name of Town. | Septic abortion. | Abortion (non-septic). | Ectopic gestation. | Other accidents of pregnancy. | Puerperal sepsis. | Puerperal alb. and convulsions. | Other toxaemias of pregnancy. | Embolism and sudden death. | Other accidents of child birth. | Other or unspecified conditions of the puerperal state. | Anaemia. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Karachi ... | ... | 3 | ... | 4 | 41 | 4 | 8 | 3 | 9 | 15 | 6 |
| Hyderabad ... | ... | 1 | ... | 2 | 40 | ... | ... | ... | 5 | ... | 4 |
| Sukkur ... | ... | ... | ... | ... | 6 | ... | ... | ... | 3 | ... | ... |
| Shikarpur ... | ... | ... | 1 | 2 | 2 | ... | 1 | 1 | 6 | ... | 1 |

*Note* 1.—2 deaths to eclampsia, 1 post partum haemorrhage, and 1 obstructed labour were recorded in Sukkur town.

*Note* 2.—The figures shown against Shikarpur town have been supplied by the Lady Doctor, In-charge, Lady Dufferin Hospital, Shikarpur. Particulars of the remaining deaths could not be collected for want of satisfactory statistical record.

6. The Government pays grant-in-aid to the following:—

| | Rs. |
|---|---|
| (1) Lady Dufferin Hospital, Karachi ... | 25,000 |
| (2) Lady Dufferin Hospital, Shikarpur ... | 5,000 |
| (3) Baker Mission Hospital, Larkana ... | 2,000 |
| (4) Alexandra Mission Hospital, Sukkur ... | 1,200 |
| (5) Lady Graham Dais Improvement Scheme ... | 3,000 |
| (6) Zanana Mission Hospital, Hyderabad ... | 2,380 |
| (7) Margaret Gibson Maternity Home, Sujawal | 1,000 |
| (8) Female Dispensary, Tando Adam ... | 2,050 |
| (9) Karachi Health Association ... | 2,000 |
| (10) R. B. Chandiram Verhomal Maternity Home, Rohri ... ... | 1,000 |
| (11) Ishwari Bai Maternity Home, Shikarpur ... | 500 |
| (12) Red Cross Society ... ... | 2,000 |
| Total Rs. | 47,130 |

## CHAPTER XI.

### Social Hygiene and Medical Inspection of Scool Children.

1. The system of school medical inspection in the Province of Sind is still in the embryonic form. The value and importance of school medical inspection has been fully realised, but the only obstacle is the provision of adequate funds.

As usual the Sind Subordinate Medical Service Officers In-charge of the mofussil dispensaries carried out monthly medical examination of children attending primary schools situated within the villages in which such dispensaries are located.

During the year under report, the Sind Subordinate Medical Service Officers examined 63,596 children as against 11,355 in the previous year. Of these, 12,904 children or 20.29 per cent. showed defects. The principal defects found were:—

Enlarged spleen, enlarged tonsils, diseases of the eye, ear, teeth, respiratory system, and digestive system, malaria, and anaemia, etc.



2. The Government Inspectors of Sanitation and Vaccination visited 98 schools to inspect the vaccinal condition of the school children and to inspect sanitation, ventilation and water-supply. Of 2,683 children examined, 437 were found to have enlarged spleens. They delivered 78 lectures on tuberculosis and general hygiene.

3. The Medical Officer of Health, Municipal Corporation of the City of Karachi, writes:—

"Although the Corporation rejected the scheme for Medical Inspection of School Children on grounds of financial stringency, examination of the teeth of the school children of a few quarters was carried out free of charge at the College of Dentistry. This has proved of immense benefit to pupils.

Poor pupils were also given free treatment. The following statistics will show the results of the examination of the teeth of the school pupils:—

Out of total number of 543 children examined;

68 per cent. were found having 'tartar' requiring cleaning.

61 per cent. were found having 'caries' in the teeth.

0.4 per cent. were found having suffering from 'abscesses'.

8 per cent. children were showing 'mal-occlusion'."

The ages of the children examined were between 5 to 13 years.

*Hyderabad town.*—Three examinations each of the duration of four months were made by the Honorary Medical Inspector, Municipal Schools, Hyderabad. In all 7,452 boys and girls were examined. The results were as under:—

| Affection. | Percentage in boys. | Percentage in girls. |
|---|---|---|
| Defects in teeth ... ... | 12·97 | 16·35 |
| Mal-nutrition and anaemia... ... | 3·43 | 5·59 |
| Enlarged spleen ... ... | 2·85 | 0·48 |
| Enlarged glands ... ... | 2·96 | 2·97 |
| Ear, nose and throat affections ... | 3·30 | 3·14 |
| Skin diseases ... ... ... | 0·70 | 0·45 |
| Eye diseases ... ... ... | 2·46 | 0·79 |
| Other affections ... ... | 0·29 | 0·20 |
| Defective vision ... ... | 7·79 | 9·12 |

Arrangements have been made in the various municipal dispensaries in the different parts of the city where pupils are treated free of charge and special attention is paid to them.

Poor children with defective vision are given spectacles free of charge from the fund collected by the Administrative Officer for such children.

---

## CHAPTER XII.

### HEALTH PROPAGANDA.

No material advancement was made with regard to public health propaganda. There is no separate establishment for the purpose. It has been recommended to the Government that in this age of publicity and in view of the increased necessity of public health propaganda specially in this Province where the public health services are so meagre, a separate establishment may be sanctioned. This recommendation and a scheme for the purpose is receiving their attention.

An account of work carried on by the various societies is given below:—

1. *Karachi Health Association.*—The Lady Health Visitor and the midwives visited 4,715 houses, talked to 9,530 women, paid visits to 1,072 ante-natal cases and 783 were re-visits. They attended to 1,051 deliveries and paid 1,906 post-natal re-visits. This Association also maintains a Maternity Home of 45 beds.

The Government of Sind increased their grant from Rs. 1,000 to Rs. 2,000.

2. *Red Cross Society.*—The Society continued to maintain Maternity Homes in Thul, Sultankot, Dadu and Nawabshah. The Society also maintained Child Welfare Centres at Kiamari and Sukkur.

The Provincial Organiser visited towns and villages, delivered 112 lectures and visited 89 Junior Red Cross Groups.

*Junior Red Cross.*—The number of groups at the end of 1939 was 285 with 12,351 members against 11,197 in 1938. The Junior Red Cross concentrating as it does on health, social service and friendship to all assisted the schools in educating children. Lectures were delivered on health, hygiene and sanitation.




PHTHISIS
INDIAN RED CROSS SOCIETY
ILL-BALANCED DIET
WELL-BALANCEDDIET


FLIES CARRY GERMS OF
TUBERCULOSIS
COMMON SMOKING SPREADS
TUBERCULOSIS
SANITARY TANK

3. *Provincial Public Health Department.*—With the present meagre staff useful work as far as possible has been done which has been very well appreciated by all. Public Health stalls had been put up at important shows and exhibitions, *e.g.* (1) The All-India Industrial Exhibition, Karachi, (ii) The Horse Show, Jacobabad, (iii) The Agri-Horticultural Shows organised by the Agricultural Department and (iv) The Rural Reconstruction Shows organised by the Special Officer, Rural Reconstruction, where public health propaganda was carried on by means of models and the exhibition of pictorial posters. Lectures on health and hygiene were also delivered.

*Anti-malaria propaganda.*—As usual anti-malaria propaganda was carried on with the aid of pictorial posters. Leaflets on malaria were widely distributed and the cheap mosquito nets were demonstrated at the shows as well as by the Touring Medical Officers on anti-malaria duty and Government Inspectors of Sanitation and Vaccination. The Medical Officers In-charge Government Travelling Dispensaries also carried on anti-malaria propaganda.

Tuberculosis propaganda was also carried on by means of Red Cross illustrated charts. The Inspectors of Sanitation and Vaccination delivered lectures on tuberculosis in the schools visited by them.

---

## CHAPTER XIII.

### PUBLIC HEALTH ADMINISTRATION.

1. *General Administration of the Department—Budget allotments increase and decrease, etc.*—The Director of Health Services and Inspector-General of Prisons, Sind, was the administrative head of the Public Health Department. There was one Assistant Director of Public Health, one Officer In-charge, Chemico-Bacteriological Laboratory, Karachi. The subordinate staff consisted of 5 Inspectors of Sanitation and Vaccination and 65 vaccinators. There were two Chemical Assistants in the Laboratory. The Bacteriological Assistant officiated as Officer In-charge of the laboratory in addition to his own duties.

The municipalities in the Province employed 6 qualified Medical Officers of Health (3 in Karachi) and 23 qualified Sanitary Inspectors. Section 119 of the Bombay District Local Boards Act, 1923, was so amended as to make it compulsory for each District Local Board to appoint a District Health Officer. It is regrettable to note that so far none of the District Local Boards have appointed Health Officers (with the exception of the District Local Board, Larkana, where a Health Officer was appointed prior to the separation of Sind).

The Government pays a grant-in-aid to the extent of 2/3rds the pay of the Health Officer, District Local Board, Larkana. This offer is open to all the District Local Boards who appoint Health Officers hereafter.

Appendix I and I-A show the qualified health staff employed in rural and urban areas and particulars of maternity and child welfare centres, health visitors, and trained midwives.

Appendix II shows the annual income and expenditure of the Public Health Department during the year 1939-40. The total amount given by Government to Local Bodies as grants-in-aid towards the pay of the health staff and vaccination establishment was Rs. 17,648. The total expenditure including this amount was Rs. 171,606.

2. *Selected District.*—The system introduced in 1910 by which the control of vaccination in one district in Sind, *viz.*, Sukkur, is exercised by the District Local Board of that district was continued throughout the year.

3. *Training of Public Health Personnel.—Training of Sanitary Inspectors.*—There was no recognised institution in the Province for the training of Sanitary Inspectors. The question of Government recognition of the proposed classes for the Sanitary Inspectors under the auspices of the Karachi Municipal Corporation was not finally decided till the end of the year.

## CHAPTER XIV.

### VACCINATION.

(This chapter and all statistical tables connected therewith refer to the period from 1st April 1939 to 31st March 1940.)

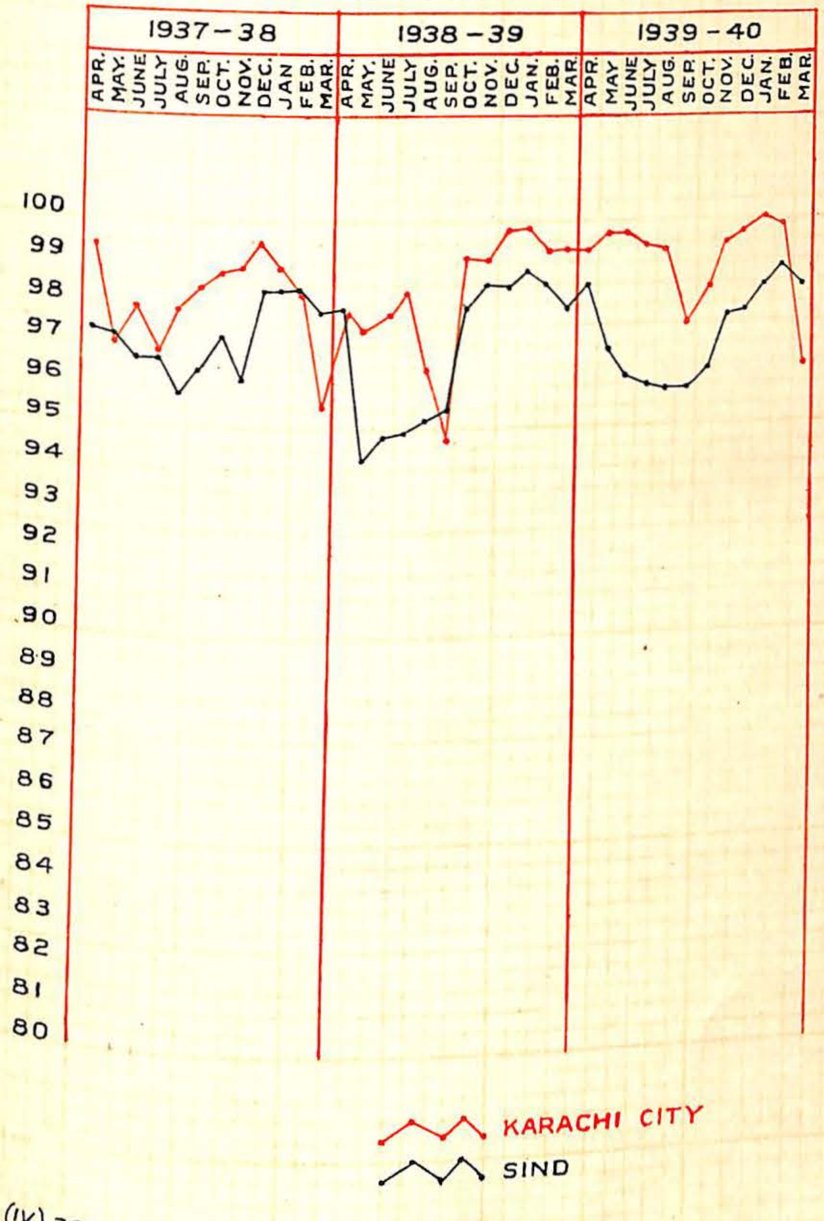
1. *Changes in the strength of establishment.*—The vaccination establishment was increased from 64 to 65 which was on account of the appointment of a separate Government Public Vaccinator for Kambar town.

2. *Primary Vaccinations.* (*Appendix IV, Statement I*).—The number of persons primarily vaccinated was 1,42,408 as compared with 1,36,467 in the previous year showing an increase of 5,941.

3. *Results.*—Out of 1,42,408 primary vaccinations, 1,31,685 or 92.47 per cent. were successful and 124 or 0.09 per cent. were unsuccessful and in the remaining 10,599 cases or 7.44 per cent. the results could not be ascertained.

## CHART VIII

INSERTION SUCCESS RATES OF PRIMARY VACCINATIONS WITH GLYCERINATED LYMPH IN THE PROVINCE OF SIND AND KARACHI CITY FOR THE YEARS 1937-38, 1938-39 AND 1939-40.




L(IV) 2015

G.P.Z.O. POONA, 1941.

22 persons were vaccinated a second time owing to the failure of the first operation.

4. *Age and Sex.*—Out of 1,42,408 primary vaccinations, 73,072 or 51.31 per cent. were infants under one year of age, 60,662 or 42.60 per cent. children between the ages of one and six years and 8,674 or 6.09 per cent. of children over 6 years of age. By sex, 76,237 were males and 66,171 were females equal to a proportion of 115.21 to 100.

5. *Re-vaccination—(Appendix IV, Statement I).*—73,605 persons were re-vaccinated during the year under report as against 79,061 in the previous year.

The percentage of successful re-vaccinations was 9.86. The results could not be ascertained in 43.61 per cent. of cases.

6. *Vaccination of pilgrims at Karachi.*—As usual a temporary vaccination establishment of one male vaccinator, one female vaccinator, one clerk, and one cooly was entertained in Karachi city for the vaccination of intending pilgrims to Hedjaz. The outward pilgrim season commenced with the 22nd November 1939 and terminated on the 5th January 1940. The number of pilgrims vaccinated at the Pilgrim Camp Vaccination Station was 2,450. The total expenditure incurred on the vaccination establishment was Rs. 301-11-6 and was borne by the Provincial Government. As against this the number of pilgrims that sailed during the previous season was 8,068 and the total cost was Rs. 735-1-0. The cost of lymph during the year under review was Rs. 136-11-6 as compared with Rs. 396-2-0 in the previous year. This disparity in the figures is due to the fact that the outward traffic was suspended for the earlier part owing to the outbreak of the European war. Consequently less number of pilgrims sailed and the duration of the establishment was correspondingly shortened.

Vaccination in police lines and outposts was carried out as usual.

7. *Primary and Re-vaccination in Indian States.*—In accordance with the Government Resolution, General Department, No. 9083, dated the 8th February 1935, the control of supervision of vaccination work in Khairpur State was handed over to the State from 1st April 1935.

8. *Cost of Vaccination.*—The cost of vaccination amounted to Rs. 1,13,384 as against Rs. 1,16,881-8-0 in the preceding year. The average cost of each successful case of vaccination was Re. 0-13-6 as compared with Re. 0-13-10 in the previous year.

9. *Vaccine Institute.*—There is no Vaccine Institute in the Province of Sind, and supplies of glycerinated calf lymph continued to be obtained from the Vaccine Institute, Belgaum. 46,500 doses of lymph were sent for and stored in the Head-office refrigerator for emergent use, of which 42,680 doses were supplied to the vaccinators in addition to their regular weekly supplies.

10. *Compulsory Vaccination.*—Excluding the 2 Cantonments of Karachi and Hyderabad and the City of Karachi, the Bombay District Vaccination Act was in force in the following 9 municipal towns :—

(1) Larkana, (2) Sukkur, (3) Rohri, (4) Hyderabad, (5) Hala, (6) Shikarpur, (7) Nasarpur, (8) Tatta, (9) Dadu.

It had been experienced that all efforts to induce many of the Municipalities to agree to the provisions of the Bombay District Vaccination Act, 1892, being extended within their limits, did not achieve the desired effect. At last the Government came to the rescue and exercised the powers conferred by clause (*b*) of sub-section (2) of section 2 of the Bombay District Vaccination Act, 1892 (Bom. I of 1892) and directed that the provisions of sections 1 to 32 of the said Act shall come into force within the Municipal districts in which these were not in force hitherto.

During the year under review 124 prosecutions were instituted in the towns where the Act was in force. Out of these 57 got their children vaccinated before the cases were heard, 1 was fined, 3 died, 2 were warned, 10 are pending, 41 were not traceable and 10 were withdrawn.

11. *Diagrams.*—Nil.

12. *General Remarks.*—Great difficulty has been experienced by the dilatory attitude of the Municipalities in not supplying in time, forms, stationery, and articles of dead stock to the public Vaccinators.

Efforts are being made to persuade the Municipalities to appoint Government Vaccinators exclusively for the towns.

During the year under report no cases of inoculation with small-pox virus were reported.

*Ill-effects of vaccination.*—No ill-effects were reported to have occurred after vaccination.

During the year 1939-40, 2 candidates were trained in vaccination. There were in all 23 candidates on the list of waiting candidates for service in the Province.



# CHAPTER XV.

## OTHER PUBLIC HEALTH SERVICES.

1. *Public Health Laboratory. The Chemico-Bacteriological Laboratory, Karachi.* — Mr. H. C. Hiranandani, Bacteriological Assistant, continued to officiate as Officer In-charge of the Chemico-Bacteriological Laboratory, Karachi, during the year 1939. There are two sections in the Laboratory, *viz.*, a Chemical Analyser's Section and a Public Analyst's Section. The Report of the Chemical Analyser's Section is published separately.

2. During the year under report, the number of samples examined in the Public Health Section of the Laboratory was 7,838 as compared with 12,215 in the previous year showing a decrease of 4,377. This is due to the fact that the Karachi Municipal Corporation discontinued sending bacteriological diagnostic work to the laboratory for examination. Added to this was the less number of samples of water for bacteriological examination and of foodstuffs for examination under the Bombay Prevention of Adulteration Act.

The details of the work during the year under report compared with the previous 5 years are given in the following table :—

| Kind of samples. | 1935. | 1936. | 1937. | 1938. | 1939. |
|---|---|---|---|---|---|
| Chemical examination of water. | 1,098 | 895 | 461 | 446 | 455 |
| Bacteriological examination of water. | 3,005 | 1,508 | 2,110 | 2,711 | 2,204 |
| Public Analyst's work. ... | 2,349 | 3,940 | 3,856 | 5,054 | 4,672 |
| Chemical examination of food stuffs. | 96 | 120 | 113 | 180 | 106 |
| Diagnostic work ... ... | 2,150 | 3,451 | 13,616 | 3,817 | 388 |
| Miscellaneous ... ... | 53 | 2 | 57 | 7 | 13 |
| Total ... | 8,751 | 9,916 | 20,214 | 12,215 | 7,838 |

3. *Examination of water supplies.*—

*Karachi.*—In order to ascertain the nature of bacteria in water, which is pumped from the wells at Dumlotte before chlorination, bacteriological examination of untreated water is carried out every day. In all 286 samples of water were examined and 1,451 samples of chlorinated water were examined bacteriologically. For the purpose of ascertaining the amount of chlorine required to purify water the daily dose is estimated and reported to the Chlorination Station.

Besides this daily examination, the Health Officer, Karachi Municipal Corporation, sent samples from various houses in different localities in the city when there was either a case of continued fever or from which complaints were received as regards bad smell in water. The number of such samples examined was 289.

61 samples of water were examined chemically. The Special Engineer, Karachi Municipal Corporation, also sent 20 samples for chemical examination in addition to the above number of 61.

The Karachi Municipal Corporation are granted liberal facilities for the examination of water and a fixed annual contribution of Rs. 2,000 is recovered from them irrespective of the number of samples examined.

*Hyderabad Municipality.*—Hyderabad Municipality sent 12 samples of chlorinated water for bacteriological examination during the year as against 4 in the previous year.

The importance of getting water supplies examined regularly and frequently has been brought to the notice of the Municipality and it is hoped that many more samples will be sent next year.

Each sample of water sent by the Hyderabad Municipality is charged for at the rate of Rs. 5.

*Sukkur Municipality.*—Sukkur Municipality sent 50 samples of water, 37 for bacteriological and 13 for chemical examination. With a view to providing better facilities to the Municipality, the Government accepted the fixed annual contribution of Rs. 640 for a fixed number of samples.

*Jacobabad Municipality.*—Jacobabad Municipality sent 8 samples for chemical analysis during the year as against 4 in the previous year. The Government were recommended that the Municipality should be granted a concession as has been done in the case of Sukkur Municipality, and accept an annual contribution of Rs. 150 for fixed number of samples.

The Officer In-charge, Chemico-Bacteriological Laboratory, Karachi, inspected the Jacobabad and Hyderabad water works. He also made inspection of river water at Kotri as complaints about the contamination of the water were received.

4. *Diagnostic work.*—The Government have provided facilities to the Local Bodies in the case of bacteriological examination of material from cases of infectious diseases at a special rate of Rs. 2 per specimen. It is regrettable to note that no advantage is being taken of this as can be seen from the fact that during the year under review no specimen was received for examination. The question of allowing free examination, with a view to encourage the sending of materials, is under consideration.



The Government have also been pleased to direct that all analytical work sent to the Chemico-Bacteriological Laboratory, Karachi, on behalf of in-patients at Government or Government aided hospitals and dispensaries, who are exempted from the payment of hospital or dispensary fees in accordance with the rules for the time being in force, should be done free of charge as an experimental measure for a period of one year with effect from the 1st November 1939.

During the year under review 388 examinations were made under this head as compared with 3,817 in the previous year. The decrease is due to the fact that the Karachi Municipal Corporation which used to send for examination many samples, sent only 20 samples during the whole of the year.

Diagnostic work included bacteriological, microscopic and chemical examination of urine, faeces, sputa, throat swabs, blood slides, blood cultures, Widal's tests, cerebro-spinal fluid, auto-vaccine, disinfetants and the examination of rats for P. Pestis

5. *Food Adulteration.*—The Bombay Prevention of Adulteration Act, 1925, was in force in the following towns :—

| Town. | | Year. |
|---|---|---|
| Karachi | ... | 1930 |
| Shikarpur | ... | 1935 |
| Hyderabad | ... | 1936 |
| Tatta | ... | 1937 |
| Sukkur | ... | 1938 |
| Larkana | ... | 1938 |

With the co-operation of the Revenue Department, the following Municipalities agreed to the extension of the provisions of the Act within their respective Municipal limits :—

Tando Adam,
Mirpurkhas,
Rohri,
Garhi Yasin,
Kotri,
Ghotki,
Jacobabad,
Shahdadpur,
Kambar,
Umarkot,
Dadu.

Negotiations were started with regard to the number of samples to be examined on their behalf and the fixed annual contribution. The question was still under correspondence till the end of the year under report.

With a view to maintaining uniformity, the Government approved of a draft set of rules framed under the provisions of the Bombay Prevention of Adulteration Act. The Municipalities in the limits of which the provisions of the Act were in force or which agreed to the extension of the same, were advised to adopt the model rules approved by the Government.

6. *Working of the Bombay Prevention of Adulteration Act.*—The number of samples of ghee or butter and milk examined under the Bombay Prevention of Adulteration Act, 1925, and the percentage of adulteration is shown in the following table :—

| Town. | Ghee and butter. | | Milk. | |
|---|---|---|---|---|
| Karachi ... | 1,229 | 19·2 | 1,632 | 17·0 |
| Hyderabad ... | 35 | 51·4 | ... | ... |
| Shikarpur ... | 43 | 65·1 | ... | ... |
| Sukkur... ... | 189 | 47·0 | 67 | 44·7 |
| Tatta ... ... | 21 | 42·8 | ... | ... |

The Karachi Municipal Corporation filed 704 cases under the Bombay Prevention of Adulteration Act, 1925. Of these only 5 ended in the acquittal of the accused, 13 pending, 29 withdrawn as untraceable, while the remaining 657 were decided in favour of the Corporation.

The number of prosecutions filed by the other Municipalities and results thereof are shown in the following statement :—

| Town. | Number of prosecu-tions. | Number acquitted. | Number with-drawn. | Number convicted. | Number pending. |
|---|---|---|---|---|---|
| Sukkur... .. | 30 | 1 | 14 | 14 | 1 |
| Shikarpur .. | 15 | ... | ... | 15 | ... |
| Hyderabad ... | 15 | ... | ... | ... | 15 |
| Tatta ... ... | 7 | ... | ... | 6 | 1 |

The convictions ranged from warnings to fines extending from Re. 1 to Rs. 150.



*Ghee Conference.*—The Official Committee appointed by the Government of Sind in 1938, concluded its deliberations during the year under report.

*General Remarks.*—The fixing of standards specially with regard to ghee and butter is a difficult problem and it is hoped that the discussions by the Central Advisory Board of Health on the Report of the *ad hoc* Committee may lead to some definite conclusion.

*Financial Position.*—The total receipts during the year 1939-40 amounted to Rs. 30,267-9-6 and the expenditure was Rs. 20,098-1-9 showing a saving of Rs. 10,169-7-9.

7. *Industrial Hygiene including Hygiene of Mines.*—The Assistant Director of Public Health continued the inspection of factories (registered under the Factories Act) in his capacity as an *ex-officio* Inspector of Factories and made out reports which were sent to the managements of the factories who were requested to carry out the recommendations contained therein. Special attention was paid to light, ventilation, water-supply, sanitary arrangements, lime washing, first aid outfits and arrangements for the welfare of the workers.

There are no mines in Sind.

---

## CHAPTER XVI.

### General Remarks.

1. *Nutrition.*—Although fully occupied on account of paucity of the public health staff, Mr. O. M. Akbani, D.P.H. (London), Assistant Director of Public Health, Sind, paid as much attention as possible to the subject of nutrition.

The following work was done during the year under report :—

(1) Propaganda with the aid of Nutrition Charts was carried on at all the important fairs and festivals. In addition to this, various articles of food stuffs arranged in order of well balanced and ill-balanced diets were actually exhibited and the visitors to the Public Health Stall were explained the significance of these.

(2) The Nutrition Section at the All-India Industrial Exhibition, Karachi, proved interesting. One of the local papers made mention of this. " Of special interest was the Health Pavilion which besides other things, showed the visitor in diagram the nature of a Balanced Diet ".

(3) Health Bulletin No. 23 entitled "The Nutritive Value of Indian Foods and the Planning of Satisfactory Diets" was translated and printed into Sindhi, copies of which were liberally distributed in schools, libraries, and other institutions.

(4) Food Charts obtained from the Secretary, Christian Literature Society for India, Madras, were re-printed with explanations in Sindhi. These were distributed free of charge.

(5) Leaflets on milk in English as well as in Sindhi, were prepared by the Public Health Department.

2. *Stegomyia Mosquito Control in Major Sea Ports of India.*—The details of stegomyia mosquito operations carried on by various local authorities are as under :—

(1) *Karachi Port Trust.*—Anti-Stegomyia measures in the harbour area and the adjoining Karachi Port Trust estate were carried out throughout the year under the direction and supervision of the Port Health Officer. The following health staff was entertained by the Karachi Port Trust :—

One Medical Officer specially trained in anti-mosquito work ;

One Sanitary Inspector (qualified).

Eight Coolies.

*Statement of work done afloat regarding inspection of Country Crafts, fishing, boats, etc.*

| Name. | Number inspected. | Number found breeding. | | |
|---|---|---|---|---|
| | | Anopheline. | Stegomyia. | Culex. |
| Country Craft ... ... | 3,998 | 4 | 638 | 3 |
| Fishing Craft ... .. | 2,200 | ... | 118 | ... |
| Lighters, Launches and harbour craft ... ... | 6,256 | ... | ... | ... |
| Total ... | 12,454 | 4 | 756 | 3 |



The following statement shows the places inspected :—

| Name. | Number inspected. | Number found breeding. | | |
|---|---|---|---|---|
| | | Anopheles. | Stegomyia. | Culex. |
| West Wharf Area .. | 1,336 | ... | ... | 3 |
| East Wharf Area ... | 3,576 | 1 | 5 | 64 |
| Mansfield Yard Area ... | 1,154 | ... | ... | 16 |
| Thole Produce Yard Area ... | 3,792 | ... | ... | 58 |
| Total ... | 9,858 | 1 | 5 | 141 |

(2) *Karachi Municipal Corporation.*—To work out systematically the Stegomyia Index for the islands of Baba, Bhit, Bunker and Shamspir, the Municipal Corporation have entertained the following extra establishment exclusively for this purpose :—

One Munshi.

Three Coolies.

The Mosquito Brigade maintained by the Corporation carried on anti-mosquito operations within the Municipal limits. About 2,54,308 houses and huts were inspected. Stegomyia mosquito larvae were found breeding in 2,463 places. About 18,607 houses and huts were inspected at the islands of Baba, Bhit, Bunker and Shamspir. Immediate action was taken in every case to destroy the larvae.

(3) *Karachi Cantonment Area.*—For Stegomyia Mosquito control in Karachi Cantonment no establishment has been exclusively entertained. The work was carried out by the Anti-Malarial Squad. Visits were paid to all bungalows and all areas in Cantonment four times during each month.

(4) *North-Western Railway Area.*—No special staff was entertained for Stegomyia operations. The work was carried on by the anti-malarial gang. Necessary steps were taken to stop further breeding at places where on inspection mosquito larvae were found.

(5) *Air Port Area.*—The staff engaged on this work was the Air Port Anti-Mosquito Gang assisted by the coolies engaged out of a special District Local Board grant of Rs. 360.

(6) *Drigh Road Cantonment.*—No establishment is maintained exclusively for this work which is incorporated in the general anti-mosquito measures undertaken in the Cantonment.

The steps taken are periodic searches for breeding places and monthly mosquito catches throughout the Cantonment. When mosquitoes are prevalent, all buildings examined are sprayed out with insecticide.

(7) *Manora Cantonment.*—The Military Area, the Cantonment Area, and the Royal Indian Navy Area are supervised by the Assistant Surgeon in Medical charge of Troops, assisted by one British and one Indian soldier and the Superintendent of the Executive Officer's office. The Royal Indian Navy Area has been personally supervised by the Assistant Surgeon in Medical charge of Troops. The only establishment exclusively employed for this purpose was one cooly employed by the Karachi Port Trust at Manora.

A monthly statement of the stegomyia index is sent on by these local bodies and a consolidated statement is prepared for the information of the Public Health Commissioner with the Government of India.

3. *Public Health Act.*—There is no comprehensive Public Health Act for the Province of Sind.

4. *Public Health Essays.*—No remarks.

5. *Board of Public Health Works.*—The following is a brief note on the Board of Public Health Works for Sind in 1939:—

(1) The project for the Improved Pressure Scheme of Karachi Water-Supply Distribution System, estimated to cost Rs. 27,31,535 was approved by the Board of Public Health Works for Sind and technically sanctioned by the Consulting Public Health Engineer to Government.

(2) It was proposed to finance the scheme by raising a loan and the Karachi Municipal Corporation are arranging to start the work as early as possible.

(3) As regards other projects already approved by the Board of Public Health Works since the date of its constitution to the end of the year 1938, the work of improvements to the Sukkur water-supply distribution system estimated to cost Rs. 3,92,500 is in progress and all the projects of improvements to the Karachi Water-Supply estimated to cost Rs. 2,49,213 are nearing completion. The following two works are expected to be started shortly:—

(i) Jacobabad Drainage and Improvements to present water-supply Rs. 5,72,525.

(ii) Larkana Drainage Scheme Rs. 4,00,000.



In addition, the following two sanctioned projects pertaining to the Hyderabad Municipality remain to be carried out. Permission to raise a loan to finance Scheme No. I, *viz.*, Rapid Filtration Plant has been accorded to by Government and work will be started shortly. The work No. 2, *viz.*, Partial Drainage Scheme will be started after permission to raise a loan for the scheme in question is granted by Government :—

(i) Rapid Filtration Plant ... Rs. 2,79,600.

(ii) Partial Drainage Scheme ... ,, 7,27,950.

During the year under report, the scheme for the drainage of Kambar town estimated to cost Rs. 1,00,000 has been approved by the Municipality and will be submitted to the Board of Public Health Works for their administrative approval.

The following Municipalities have called for preparation of plans and estimates for improvements to their present water-supply and drainage :—

(1) *Sukkur Municipality.*—It is proposed to prepare a complete scheme for drainage of the whole town including Old Sukkur and Garibabad Quarters, etc., within Municipal limits. The site for the sullage farm has been proposed below the Barrage and as soon as it is definitely decided upon, the scheme will be prepared accordingly.

(2) *Mirpurkhas Municipality.*—The Municipality desired to improve the source of water-supply and the present system of disposal of the sullage water. The staff required for preparation of the schemes will be appointed soon.

(3) *Kotri Municipality.*—The plans and estimates for water-supply and drainage of the Kotri town have been prepared by the Municipality and submitted for scrutiny.

(4) *Shahdadpur Municipality.*—The Municipality desires to improve the present system of disposal of sullage and storm water. The staff required to prepare the scheme will be appointed soon.

(5) *Ratodero Municipality.*—It is proposed to improve the present system of disposal of sullage and storm water. The project will be taken in hand after inspection of the site by the Consulting Public Health Engineer to Government.

6. *Problems of Public Health, Co-operation between various local authorities. Formation of Sanitary Boards.*—The need for close co-operation between the various local authorities, *viz.*, Municipal, Railway, Local Board, Public Works Department and

the Revenue Department in problems of Sanitation and Public Health in large towns in Sind has been very keenly felt. A Sanitary Board was established at Karachi in 1932 the details of which were given in the Annual Report for the year 1938. Similar Boards have now been formed at all the district head-quarter towns.

In their Resolution, General Department, No. 452-G.B./37(VIII), dated the 26th July 1939, the Government were pleased to recognise the Sanitary Board, Karachi.

7. *Personal Proceedings and Office.*—The following table shows the various officers who held the appointments in the Public Health Department during the year under report :—

| Appointment. | Name. | Period. | Remarks. |
|---|---|---|---|
| Director of Health Services and Inspector-General of Prisons, Sind. | Lieut-Col. N. Briggs, M.R.C.S. (Eng.), D.P.H., I.M.S. | 1st January to 31st December 1939. | |
| Assistant Director of Public Health, Sind. | Mr. O. M. Akbani, M.B.B.S. (Bom.), D.P.H. (London). | Do. | |
| Officer in-charge, Chemico Bacteriological Laboratory, Karachi. | Mr. H. C. Hiranandani. | Do. | Officiated in addition to his own duties. |

Mr. O. M. Akbani, M.B.,B.S. (Bom.), D.P.H. (London), was confirmed as Assistant Director of Public Health, Sind, on the 1st July 1939.

The post of the Officer In-charge Chemico-Bacteriological Laboratory, Karachi, and the Chemical Examiner to Government was not permanently filled in till the end of the year.

The Director of Health Services and Inspector-General of Prisons, Sind, attended the meetings of the Executive Committees of St. John's Ambulance Association, Red Cross Society, Hirانand Leper Asylum, Countess of Dufferin's Fund, Sind Provincial Council, Sind Provincial Tuberculosis Association, and acted as Chairman of the Red Cross Child Welfare Sub-Committee. He also inspected sanitary conditions of the following towns and advised the Municipalities on public health measures :—

Mirpurkhas, Shikarpur, Dadu and Tando Adam.



The Assistant Director of Public Health, Sind, inspected the sanitary condition of 5 Municipal towns. He inspected vaccinal condition of children during the course of his tour and also inspected the sanitary condition of Police lines, Sub-jails, and Dispensaries. Suggestions for improving the sanitation of these were communicated to the authorities concerned. He inspected 6 factories, approved of site plans for the construction of school buildings and gave opinion on the analytical results of some samples of water examined at the Chemico-Bacteriological Laboratory, Karachi. He conducted a class of touring medical officers appointed on anti-malaria duty, for one week at Hyderabad and gave practical demonstrations to them. He visited Ratodero and Sukkur towns in connection with sewage pit and mosquito menace, respectively. He delivered lectures in Hygiene to the Hyderabad Medical students. He attended the meetings of the Karachi Sanitary Board and Karachi Health Association. He also visited Khadeji Hill Water Falls.

The Assistant Director of Public Health, on receipt of a report of the outbreak of cholera, immediately proceeded to the affected area and convened a conference to discuss the ways and means to meet with any emergency.

He attended the Lal Shahbaz Fair, Sehwan with a view to investigating the problem of avoiding the spread of venereal disease at such fairs in rural areas.

He was present at the inaugural ceremony of the Rural Reconstruction Centre at Butra, district Dadu.

He was a member of the Foods Inspection Committee on the occasion of the All-India Industrial Exhibition, Karachi. He was also a member of the Education Court Committee.

The Inspectors of Sanitation and Vaccination gave lectures on tuberculosis in schools, and inspected the vaccinal condition of school children. They were deputed to look after the sanitation of fair areas. During their tours, they visited 1,287 villages for inspection of vacination work and examined 22,012 children for primary vaccination and re-vaccination. They also visited villages for sanitary inspections. The Inspectors paid periodical visits to the areas selected for intensive rural reconstruction programme and attended the meetings of the Village Sudhar Committees.

*Office Staff.*—The office work has increased considerably and the existing staff is hardly adequate to cope with it. It is a pleasure to record that the difficulty was tided over to some extent by the great zeal with which the staff worked.

The Laboratory staff also worked satisfactorily.

N. BRIGGS, Lieut-Col., I.M.S.,
Director of Health Services and Inspector-General of Prisons, Sind, Karachi.

Karachi, 22nd August 1940.

## APPENDIX I.

*Table showing Health Services in Rural and Urban areas in the Province of Sind during 1939.*

| Districts. | Rural areas. | | | | | | | | School Medical Officers. | Other Health staff. | Urban areas. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Medical Officers of Health. | | | | Epidemic staff. | Sanitary and Health Ins-pectors. | Vaccinators. | | | | Medical Officers of Health. | | | | Sanitary and Health Ins-pectors. | Vaccinators. | | Ins-pectors of Vacci-nation. | School Medical Officers. | Other Health staff. |
| | Holding D. P. H. | | Licentiates L. P. H. S. | | | | Male. | Female. | | | Holding D. P. H. | | Licentiates L. P. H. S. | | | Male. | Female. | | | |
| | Whole time. | Part time. | Whole time. | Part time. | | | | | | | Whole time. | Part time. | Whole time. | Part time. | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Karachi ... ... | ... | ... | ... | ... | ... | ... | 9 | ... | ... | ... | 3 | ... | 3 | ... | 8 | 5 | 2 | ... | ... | ... |
| Dadu ... ... | ... | ... | ... | ... | ... | ... | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Hyderabad ... ... | ... | ... | ... | ... | ... | ... | 11 | ... | ... | ... | 1 | ... | ... | ... | 4 | 1 | ... | 1 (Superintendent of Vaccination). | 1 (Part time). | ... |
| Nawabshah ... ... | ... | ... | ... | ... | ... | ... | 10 | ... | ... | ... | ... | ... | ... | ... | 2 | ... | .. | ... | ... | ... |
| Thar Parkar ... ... | ... | ... | ... | ... | ... | ... | 13 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... |
| Larkana ... ... | ... | ... | 1 (Holding M.B. B.S., degree.) | ... | ... | 1 | 9 | 1 | ... | ... | ... | ... | ... | ... | 1 | 2 | ... | ... | ... | ... |
| Sukkur ... ... | ... | ... | ... | ... | ... | ... | 9 | ... | ... | ... | 2 | ... | ... | ... | 8 | 3 | ... | ... | ... | ... |
| Upper Sind Frontier ... | ... | ... | ... | .. | ... | ... | 6 | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... |
| Total ... | ... | ... | 1 | ... | ... | 1 | 75 | 1 | ... | ... | 6 | ... | 3 | ... | 25 | 12 | 2 | 1 | 1 | ... |

# APPENDIX I-A.

*Table showing maternity and child welfare centres health visitors, mid-wives and dais in rural and urban areas in the Province of Sind during 1939.*

| District. | Maternity and Child Welfare Centres maintained by— Government. Rural. | Government. Urban. | Local and Municipal Bodies. Rural. | Local and Municipal Bodies. Urban. | Other agencies. Rural. | Other agencies. Urban. | Trained visitors. Rural. | Trained visitors. Urban. | Trained mid-wives. Rural. | Trained mid-wives. Urban. | Trained dais. Rural. | Trained dais. Urban. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Karachi ... | ... | ... | 1 | 6 | ... | 2 | ... | 4 | 2 | 8 | ... | 17 |
| Dadu ... | ... | ... | 5 | ... | ... | 2 | ... | ... | 2 | 3 | 5 | 1 |
| Hyderabad ... | ... | ... | 2 | 1 | ... | 1 | ... | ... | ... | ... | 1 | 4 |
| Nawabshah ... | ... | ... | ... | ... | ... | 2 | ... | ... | ... | 2 | 5 | 1 |
| Thar Parkar ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | 1 | 8 | 1 |
| Larkana ... | ... | ... | 19 | 1 | ... | 1 | ... | ... | ... | 3 | 20 | ... |
| Sukkur ... | ... | ... | 1 | ... | 4 | 4 | ... | 1 | 1 | 13 | 6 | 24 |
| Upper Sind Frontier... | ... | ... | 1 | ... | 1 | 2 | ... | ... | ... | 2 | 3 | ... |
| Total ... | ... | ... | 30 | 9 | 5 | 14 | ... | 5 | 5 | 32 | 48 | [illegible] |

# APPENDIX II.

*Statement showing the annual Income and Expenditure of Institutions under the Public Health Department, Sind, during the year 1939-40.*

| No. | Name of Institute. | Income. Sale proceeds of sera vaccines, quinine and malaria posters, etc. | Contribution | Miscellaneous. | Recovery of over payments. | Collection of fees for services rendered. | Deduct refunds. | Total. | Expenditure. Pay of officers and leave salaries, etc. | Pay of Establishment including menials. | Allowances. | Contingencies. | Grant-in-aid to Local Bodies. | Other charges including expenditure on Medical Officers appointed on malaria, quinine, etc. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 1 | Director of Health Services and Assistant Director of Public Health, Sind. | ... | ... | ... | ... | ... | ... | ... | 15,242 | 22,176 | 7,327<br>711(a) | 3,359 | 11,533(b) | 41,366 | 10,204 Charged.<br>90,799 Voted.<br>711 Charged. |
| 2 | Chemico-Bacteriological Laboratory, Karachi. | 14,394 | 38,876 | 23,592 | 871 | 57,798 | 195 | 1,35,336 | 4,800 | 9,840 | 2,147 | 4,797 | ... | ... | 21,584 Voted. |
| 3 | Local Vaccination Establishment. | ... | ... | ... | ... | ... | ... | .. | ... | 31,689 | 10,504 | ... | 6,115(c) | ... | 48,308 Voted. |
| | Total ... | 14,394 | 38,876 | 23,592* | 871* | 57,798* | 195 | 1,35,336* | 20,042 | 63,705 | 20,689 | 8,156 | 17,648 | 41,366 | 10,915 Charged.<br>1,60,691 Voted. |

* These include amounts pertaining to Anti-Rabic charges, fees realised by the Consulting Public Health Engineer and Consulting Surveyor to the Government of Sind.

(*a*) Sterling overseas pay of the Director of Health Services and Inspector-General of Prisons, Sind.

(*b*) Grant-in-aid to municipalities in connection with the employment of subsidised health staff.

(*c*) Grant-in-aid to District Local Boards, Sukkur and Larkana, and municipalities in the Sukkur District on account of vaccinators.

# APPENDIX III.

## FORM No. I.

*Annual statement showing the Births registered in the Districts of the Province of Sind during 1939.*

| 1 | 2 | 3 | | | 4 | | | 5 | | | 6 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Districts. | Population according to Census of 1931. | | | Number of Births registered. | | | Ratio of Births per 1,000 of population. | | | Mean Ratio of Births per 1,000 during previous five years. | | |
| | | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| 1 | Karachi ... ... | 3,28,679 | 2,50,753 | 5,79,432 | 10,002 | 8,982 | 18,984 | 17·26 | 15·50 | 32·76 | ... | ... | ... |
| 2 | Hyderabad ... ... | 3,71,097 | 2,90,679 | 6,61,776 | 5,732 | 4,329 | 10,061 | 8·66 | 6·54 | 15·20 | ... | ... | ... |
| 3 | Nawabshah ... ... | 2,79,032 | 2,17,580 | 4,96,612 | 4,431 | 2,959 | 7,390 | 8·92 | 5·96 | 14·88 | ... | ... | ... |
| 4 | Thar Parkar ... ... | 2,61,945 | 2,06,095 | 4,68,040 | 5,443 | 4,224 | 9,667 | 11·63 | 9·02 | 20·65 | ... | ... | ... |
| 5 | Larkana ... ... | 2,50,178 | 2,01,963 | 4,52,141 | 5,770 | 4,577 | 10,347 | 12·76 | 10·10 | 22·86 | ... | ... | ... |
| 6 | Dadu ... ... | 1,87,071 | 1,47,211 | 3,34,282 | 3,353 | 2,564 | 5,917 | 10·03 | 7·67 | 17·70 | ... | ... | ... |
| 7 | Sukkur ... ... | 3,49,312 | 2,74,467 | 6,23,779 | 8,356 | 6,678 | 15,034 | 13·40 | 10·70 | 24·10 | ... | ... | ... |
| 8 | Upper Sind Frontier ... | 1,45,588 | 1,14,738 | 2,60,326 | 2,004 | 1,542 | 3,546 | 7·69 | 5·93 | 13·62 | ... | ... | ... |
| 9 | Town Circles ... ... | 3,96,171 | 2,89,031 | 6,85,202 | 14,680 | 13,272 | 27,952 | 21·43 | 19·36 | 40·79 | ... | ... | ... |
| 10 | Rural Circles ... ... | 17,76,731 | 14,14,455 | 31,91,186 | 30,411 | 22,583 | 52,994 | 9·53 | 7.08 | 16·61 | ... | ... | ... |
| 11 | Grand total of the Province. | 21,72,902 | 17,03,486 | 38,76,388 | 45,091 | 35,855 | 80,946 | 11·63 | 9·25 | 20·88 | ... | ... | ... |

## FORM No. I (a).

*Annual statement showing still-births registered according to the classes and sex in the Districts of the Province of Sind during the year 1939.*

| Serial No. | Districts. | Still Births. | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Muhammadans | | Hindus. | | Jains. | | Christians. | | Parsis. | | Other classes. | | Total. | | | Percentage Ratio to live births. |
| | | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Total. | |
| 1 | Karachi ... ... | 120 | 102 | 159 | 114 | ... | ... | 13 | 3 | ... | 1 | 3 | ... | 295 | 210 | 505 | 2·66 |
| 2 | Hyderabad ... ... | 17 | 13 | 101 | 67 | ... | ... | 1 | ... | ... | ... | ... | ... | 119 | 80 | 199 | 1·98 |
| 3 | Nawabshah ... ... | 4 | 6 | 12 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | 16 | 12 | 28 | 0·38 |
| 4 | Thar Parkar ... ... | 4 | 3 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 5 | 11 | 0·11 |
| 5 | Larkana ... ... | 28 | 18 | 16 | 19 | ... | ... | ... | ... | ... | ... | ... | ... | 44 | 37 | 81 | 0·78 |
| 6 | Dadu ... ... | 6 | 7 | 6 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 12 | 10 | 22 | 0·38 |
| 7 | Sukkur ... ... | 12 | 7 | 106 | 62 | ... | ... | ... | ... | ... | ... | ... | ... | 118 | 69 | 187 | 1·25 |
| 8 | Upper Sind Frontier ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| | Total, Sind ... | 191 | 156 | 402 | 273 | | | 14 | 3 | ... | 1 | 3 | ... | 610 | 423 | 1,033 | 1·28 |

## APPENDIX [I]I—*contd.*

### FORM NO. II.

*Annual statement showing the Births and Deaths registered in the Districts of the Province of Sind during the year 1939.*

| 1 | 2 | 3 | 4 | 5 | | | 6 | | 7 | | | 8 | 9 | | | | | | | | | | | 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Serial Number. | Districts. | Area in square miles. | Average population per square mile. | Population (Census, 1931). Male. | Female. | Total. | Births. Total number. | Birth rate per 1000, of population. | Number of deaths registered. Male. | Female. | Total. | …mber of …aths …males every … dea- …s of …males. | Deaths per 1,000 of population from Cholera. | Small-pox. | Plague. | Fevers. | Dysentery and Diarrhœa. | Respiratory diseases. | Injuries. | All other causes. | All causes. Male. | All causes. Female. | All causes. Total. | Mean ratio of deaths per 1,000 during previous five years. Male. | Female. | Total. |
| 1 | Karachi ... R. C. ... | 1,615 | 23 | 18,610 | 16,604 | 35,214 | 479 | 13·60 | 121 | 117 | 238 | 3·42 | ... | ... | ... | 4·18 | 0·03 | 1·36 | 0·03 | 1·16 | 6·50 | 7·05 | 6·76 | 9·72 | 9·87 | 9·89 |
| 2 | Tatta ... ,, ... | 1,318 | 46 | 28,810 | 22,097 | 50,907 | 380 | 7·46 | 165 | 118 | 283 | ·36 | ... | 0·12 | ... | 2·69 | 0.02 | 1·75 | 0·12 | 0·86 | 5·73 | 5·34 | 5·56 | 6·25 | 6·06 | 6·14 |
| 3 | Mirpur Sakro ... ,, ... | 1,738 | 30 | 18,771 | 15,585 | 34,356 | 419 | 12·20 | 227 | 181 | 408 | 5·41 | ... | ... | .. | 6·49 | 0·03 | 3·32 | 0·35 | 1·68 | 12·09 | 11·61 | 11·87 | 8·57 | 8·21 | 8·35 |
| 4 | Ghorabari ... ,, ... | 339 | 69 | 13,598 | 10,820 | 24,418 | 269 | 11·02 | 116 | 81 | 197 | ·20 | ... | 0·45 | ... | 2·83 | ... | 3·32 | 0·24 | 1·23 | 4·75 | 3·32 | 8·07 | 9·85 | 9·42 | 9·66 |
| 5 | Ketibundar ... ,, ... | 213 | 63 | 7,236 | 6,322 | 13,558 | 186 | 13·72 | 71 | 59 | 130 | ·34 | ... | 0·15 | ... | 3·76 | 0·07 | 2·80 | 0·22 | 2·58 | 9·81 | 9·33 | 9·58 | 8.42 | 7·27 | 7·88 |
| 6 | Mirpur Bathoro ... ,, ... | 272 | 158 | 23,992 | 18,834 | 42,826 | 533 | 12·45 | 232 | 173 | 405 | ·11 | ... | 0·02 | ... | 5·19 | 0·12 | 2·66 | 0·16 | 1·31 | 9·67 | 9·13 | 9·46 | 10·83 | 10·35 | 10·62 |
| 7 | Sujawal ... ,, ... | 269 | 14 | 21,117 | 16,829 | 37,916 | 625 | 16·47 | 206 | 148 | 354 | ·05 | ... | ... | ... | 4·28 | 0·05 | 3·69 | 0.10 | 1·11 | 9·75 | 8·79 | 9·33 | 11·46 | 10·22 | 10·91 |
| 8 | Jati ... ... ,, ... | 1,475 | 23 | 19,214 | 15,437 | 34,655 | 455 | 13·13 | 227 | 168 | 395 | ·12 | ... | 0·17 | ... | 5·02 | ... | 3·81 | 0·38 | 2·02 | 11·81 | 10.80 | 11·40 | 10·51 | 9·33 | 9·98 |
| 9 | Shahbandar ... ,, ... | 1,388 | 29 | 22,058 | 17,832 | 39,890 | 548 | 13·73 | 258 | 194 | 452 | ·99 | ... | 0·30 | ... | 5·16 | 0·08 | 3·68 | 0·35 | 1·76 | 11·61 | 10·88 | 11·33 | 11·47 | 11·27 | 11·38 |
| 10 | Karachi ... T. C. ... | 62 (rows 10–11) | 4,098 (rows 10–11) | 145,052 | 102,739 | 247,791 | 14,578 | 58·83 | 3,404 | 2,843 | 6,247 | ·73 | ... | 0·05 | ... | 0·73 | 2·53 | 10·75 | 0·45 | 10·70 | 23·46 | 27·67 | 25·21 | 23·39 | 27·23 | 24·98 |
| 11 | Karachi ... C. C. ... | | | 3,707 | 2,533 | 6,210 | 373 | 59·77 | 68 | 42 | 110 | ·91 | ... | ... | ... | 4·81 | 1·44 | 2·24 | 0·13 | 8·97 | 18·34 | 16·58 | 17·62 | 15·91 | 18·16 | 16·83 |
| 12 | Drigh Road ... ,, ... | ... | ... | 1,400 | 600 | 2,000 | 29 | 14·50 | 3 | 6 | 9 | ·00 | ... | ... | ... | 3·50 | ... | 0·50 | ... | 0·50 | 2·14 | 10·00 | 4·50 | ... | ... | ... |
| 13 | Tatta ... T. C ... | ... | ... | 5,114 | 4,521 | 9,635 | 110 | 11·42 | 46 | 27 | 73 | ·37 | ... | ... | ... | 1·14 | 0·10 | 3·63 | 0·21 | 2·49 | 9·00 | 6·00 | 7·57 | 13·68 | 11·28 | 12·55 |
| | Total, Karachi District... | 8,089 | 72 | 328,679 | 250,733 | 579,432 | 18,784 | 32·76 | 5,144 | 4,157 | 9,301 | ·74 | ... | 0·09 | ... | 2·80 | 1·13 | 6·24 | 0·32 | 5·47 | 15·62 | 16·57 | 16·05 | 15·82 | 16·70 | 16·20 |
| 14 | Hyderabad ... R. C. ... | 366 | 212 | 43,515 | 34,433 | 79,948 | 656 | 8·42 | 303 | 200 | 503 | ·50 | | 0·06 | ... | 3·90 | 0·03 | 1·60 | 0·08 | 0·78 | 6·96 | 5·81 | 6·45 | 9·51 | 8·94 | 9·38 |
| 15 | Guni ... ... ,, ... | 987 | 106 | 55,089 | 42,830 | 97,919 | 771 | 7·87 | 363 | 244 | 607 | ·77 | ... | 0·01 | ... | 3·67 | 0·05 | 1·72 | 0·09 | 0·66 | 6·59 | 5·70 | 6·20 | 7·57 | 7·05 | 7·34 |
| 16 | Tando Bago ... ,, ... | 650 | 105 | 38,438 | 29,560 | 67,998 | 531 | 7·66 | 243 | 151 | 394 | ·93 | ... | 0.28 | ... | 3·84 | 0·16 | 0·81 | 0·21 | 0·59 | 6·32 | 5·11 | 5·80 | 7·33 | 6·22 | 6·80 |
| 17 | Badin ... ,, ... | 792 | 113 | 50,169 | 39,111 | 89,280 | 827 | 9·26 | 363 | 306 | 669 | ·22 | ... | 0·16 | ... | 4·04 | 0·01 | 2·09 | 0·15 | 1·04 | 7·23 | 7·82 | 7·49 | 7·45 | 6·82 | 7·18 |
| 18 | Tando Allahyar ... ,, ... | 595 | 103 | 28,987 | 22,933 | 51,920 | 826 | 15·91 | 465 | 296 | 761 | ·10 | ... | 0·35 | ... | 11·09 | 0·02 | 1·95 | 0·09 | 1·16 | 16·04 | 12·91 | 14·66 | 14·11 | 11·72 | 13·06 |
| 19 | Hala ... ... ,, ... | 511 | 222 | 56,552 | 42,948 | 99,500 | 1,263 | 12·63 | 502 | 370 | 872 | ·68 | ... | 0·11 | ... | 5·18 | 0·05 | 2·24 | 0·07 | 1·11 | 8·87 | 8·61 | 8·76 | 10·87 | 9·84 | 10·44 |
| 20 | Matli ... ,, ... | 498 | 94 | 25,678 | 20,960 | 46,638 | 688 | 14·75 | 324 | 246 | 570 | ·71 | 0·06 | 0·34 | ... | 7·70 | 0·04 | 2·49 | 0·13 | 1·46 | 12·62 | 11·73 | 12·22 | 11·72 | 10·69 | 11·25 |
| 21 | Hyderabad ... T. C. ... | 18 (rows 21–22) | 5,334 (rows 21–22) | 53,339 | 42,682 | 96,021 | 4,035 | 42·03 | 1,375 | 1,165 | 2,544 | ·37 | ... | 0·35 | ... | 4·17 | 0·64 | 7·26 | 0·56 | 13·51 | 25·85 | 27·29 | 26·49 | 27·36 | 27·20 | 27·28 |
| 22 | Hyderabad ... C. C. ... | | | 2,770 | 1,760 | 4,530 | 53 | 11·70 | 16 | 12 | 28 | ·33 | ... | ... | ... | 2·64 | ... | 1·77 | ... | 1·77 | 5·78 | 6·82 | 6·18 | ... | ... | ... |
| 23 | Hala ... T. C. ... | ... | ... | 3,948 | 3,356 | 7,304 | 199 | 27·24 | 49 | 26 | 75 | ·46 | ... | ... | ... | 6·02 | ... | 2·05 | ... | 2·19 | 12·41 | 7·75 | 10·26 | 10·64 | 9·23 | 9·99 |
| 24 | Matiari ... ,, ... | ... | ... | 3,930 | 2,762 | 6,692 | 92 | 13·74 | 49 | 40 | 89 | ·50 | ... | 0·45 | ... | 5·68 | ... | 3·88 | 0·30 | 2·98 | 12·46 | 14·48 | 13·29 | 13·78 | 18·10 | 15·61 |
| 25 | Tando Muhammadkhan. ... ,, ... | ... | ... | 3,669 | 2,957 | 6,626 | 66 | 9·96 | 65 | 44 | 100 | ·00 | ... | 0·91 | ... | 9·06 | ... | 2·56 | ... | 3·92 | 17·71 | 14·88 | 16·45 | 13·63 | 15·55 | 14·48 |
| 26 | Nasarpur ... ,, ... | ... | ... | 2,261 | 1,993 | 4,254 | 31 | 7·27 | 25 | 19 | 44 | ·57 | ... | ... | ... | 2·82 | 0·70 | 4·23 | ... | 2·59 | 11·05 | 9·53 | 10·34 | 20·79 | 19·66 | 19·74 |
| 27 | Tando Allahyar ... ,, ... | ... | ... | 2,752 | 2,394 | 5,146 | 33 | 6·41 | 45 | 22 | 67 | ·55 | ... | 0·19 | ... | 5·05 | ... | 3·11 | 0·19 | 4·47 | 16·35 | 9·19 | 13·01 | [illegible] | [illegible] | [illegible] |
| | Total, Hyderabad District ... | 4,417 | 150 | 371,097 | 290,679 | 661,776 | 10,061 | 15·20 | 41·91 | 31·41 | 73·32 | ·42 | 0·05 | 0·19 | ... | 5·03 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

APPENDIX II—*contd.*

| 1 Serial number. | 2 Districts. | 3 Area in square miles. | 4 Average population per square mile. | 5 Population (Census, 1931). Male. | Female. | Total. | 6 Births. Total. | Birth rate per 1,000 of population. | 7 Number of deaths registered. Male. | Female. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | Shahdadpur ... R. C. ... | 561 | 184 | 45,732 | 35,169 | 80,901 | 1,229 | 15·19 | 409 | 264 | 673 |
| 29 | Kandiaro ... ,, ... | 404 | 200 | 4,4231 | 36,583 | 80,814 | 1,284 | 15·89 | 394 | 338 | 732 |
| 30 | Naushahro Feroze. ,, ... | 492 | 175 | 47,424 | 38,644 | 86,068 | 1,239 | 14·40 | 494 | 333 | 827 |
| 31 | Moro ... ,, ... | 483 | 124 | 33,904 | 26,659 | 59,563 | 927 | 15·56 | 305 | 244 | 549 |
| 32 | Sakrand ... ,, ... | 506 | 124 | 35,901 | 26,575 | 62,476 | 591 | 9·46 | 227 | 142 | 369 |
| 33 | Nawabshah ... ,, ... | 967 | 58 | 28,387 | 20,860 | 49,247 | 807 | 16·39 | 255 | 179 | 434 |
| 34 | Sinjhoro ... ,, ... | 475 | 161 | 27,351 | 20,853 | 48,204 | 817 | 16·95 | 305 | 186 | 491 |
| 35 | Tando Adam ... T. C. ... | ... | ... | 7,598 | 5,871 | 13,469 | 276 | 20·49 | 101 | 109 | 210 |
| 36 | Nawabshah ... ,, ... | ... | ... | 4,336 | 2,687 | 7,023 | 141 | 20·08 | 110 | 75 | 185 |
| 37 | Shahdadpur ... ,, ... | ... | ... | 5,168 | 3,679 | 8,847 | 79 | 8·93 | 27 | 16 | 43 |
| | Total, Nawabshah District ... | 3,888 | 128 | 279,032 | 217,580 | 496,612 | 7,390 | 14·88 | 26·27 | 1,886 | 4,5[illegible]3 |
| 38 | Umarkot ... R. C. ... | 1,459 | 30 | 22,281 | 17,347 | 39,628 | 599 | 15·12 | 289 | 183 | 473 |
| 39 | Jamesabad ... ,, ... | 505 | 61 | 17,188 | 13,557 | 30,745 | 807 | 26·25 | 342 | 241 | 583 |
| 40 | Chachro ... ,, ... | 2,797 | 22 | 33,217 | 28,757 | 61,974 | 14·70 | 23·72 | 678 | 508 | 11·86 |
| 41 | Nagar Parkar ... ,, ... | 1,618 | 26 | 22,384 | 19,342 | 41,726 | 1,359 | 32·57 | 342 | 243 | 585 |
| 42 | Diplo ... ,, ... | 1,503 | 16 | 13,743 | 11,499 | 25,242 | 557 | 22·06 | 200 | 138 | 355 |
| 43 | Mithi ... ,, ... | 1,562 | 29 | 24,372 | 21,337 | 45,709 | 1,323 | 28·90 | 462 | 320 | 782 |
| 44 | Khipro ... ,, ... | 2,251 | 23 | 29,606 | 21,424 | 51,030 | 451 | 8·84 | 239 | 166 | 405 |
| 45 | Sanghar ... ,, ... | 818 | 41 | 20,010 | 13,767 | 33,777 | 524 | 15·51 | 187 | 117 | 304 |
| 46 | Mirpurkhas ... ,, ... | 415 | 115 | 21,268 | 16,090 | 37,358 | 901 | 24·12 | 386 | 272 | 658 |
| 47 | Samaro ... ,, ... | 483 | 91 | 25,229 | 18,550 | 43,779 | 450 | 10·28 | 234 | 126 | 360 |
| 48 | Digri ... ,, ... | 225 | 191 | 24,180 | 18,873 | 43,053 | 1,004 | 23·32 | 384 | 328 | 712 |
| 49 | Umarkote ... T. C. ... | ... | ... | 2,047 | 1,794 | 3,841 | 86 | 22·39 | 32 | 24 | 56 |
| 50 | Mirpurkhas ... ,, ... | ... | ... | 6,420 | 3,758 | 10,178 | 136 | 13·36 | 105 | 57 | 162 |
| | Total, Thar Parkar District ... | 13,636 | 34 | 261,945 | 206,095 | 468,040 | 9,667 | 20·65 | 38·80 | 2,723 | 6.603 |
| 51 | Larkana ... R. C. ... | 217 | 329 | 39,422 | 31,850 | 71,272 | 1,361 | 19·09 | 448 | 310 | 758 |
| 52 | Warah ... ,, ... | 380 | 148 | 30,701 | 25,396 | 56,097 | 1,417 | 25·26 | 334 | 293 | 626 |
| 53 | Dokri ... ,, ... | 326 | 235 | 42,332 | 34,235 | 76,567 | 1,877 | 24·52 | 536 | 411 | 947 |
| 54 | Kambar ... ,, ... | 473 | 173 | 39,689 | 32,339 | 72,028 | 1,084 | 15·05 | 335 | 272 | 607 |
| 55 | Mirokhan ... ,, ... | 288 | 164 | 26,177 | 21,037 | 47,214 | 990 | 20·97 | 259 | 189 | 448 |
| 56 | Ratodero ... ,, ... | 214 | 214 | 28,152 | 23,612 | 51,764 | 1,337 | 25·83 | 344 | 253 | 597 |
| 57 | Shahdadkot ... ,, ... | 577 | 58 | 18,572 | 14,784 | 33,356 | 916 | 27·40 | 155 | 139 | 294 |
| 58 | Larkana ... T. C. ... | 2 | 13,420 | 15,341 | 11,200 | 26,841 | 926 | 34·50 | 226 | 213 | 439 |
| 59 | Kambar ... ,, ... | ... | ... | 5,500 | 4,217 | 9,717 | 218 | 22·43 | 63 | 68 | 136 |
| 60 | Ratodero ... ,, ... | ... | ... | 3,992 | 3,293 | 7,285 | 221 | 31·57 | 50 | 59 | 109 |
| | Total, Larkana District ... | 2,477 | 150 | 250,178 | 201,963 | 452,141 | 10,347 | 22·88 | 2,755 | 22.06 | 4,961 |

| 1 Serial number. | 8 Number of deaths of males to every 100 deaths of females. | 9 Deaths per 1,000 of population from Cholera. | Small-pox. | Plague. | Fevers. | Dysentery and Diarrhœa. | Respiratory diseases. | Injuries. | All other causes. | All causes. Male. | Female. | Total. | 10 Mean ratio of deaths per 1,000 during previous five years. Male. | Female. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | 151·13 | ... | 0·02 | ... | 6·29 | 0·02 | 0·94 | 0·24 | 0·81 | 9·89 | 7·51 | 8·32 | 10·58 | 11·65 | 12·16 |
| 29 | 116·57 | ... | ... | ... | 7·19 | ... | 0·38 | 0·10 | 1·39 | 8·91 | 9·27 | 9·06 | 10·76 | 11·01 | 10·88 |
| 30 | 148·35 | ... | 0·16 | ... | 7·04 | 0·03 | 0·93 | 0·20 | 1·25 | 10·41 | 8·60 | 9·61 | 10·08 | 9·60 | 9·74 |
| 31 | 125·00 | ... | 0·03 | ... | 7·07 | 0·05 | 0·59 | 0·24 | 1·24 | 9·27 | 9·15 | 9·22 | 10·39 | 9·75 | 10·10 |
| 32 | 159·86 | ... | 0·21 | ... | 4·50 | ... | 0·45 | 0·11 | 0·64 | 6·32 | 5·34 | 5·91 | 7·38 | 6·13 | 6·85 |
| 33 | 142·46 | ... | 0·22 | ... | 7·07 | 0·02 | 0·55 | 0·12 | 0·83 | 8·98 | 8·58 | 8·81 | 9·12 | 8·10 | 8·73 |
| 34 | 163·98 | ... | 0·14 | ... | 7·51 | 0·02 | 0·77 | 0·17 | 1·58 | 10·75 | 8·92 | 10·19 | 12·98 | 11·89 | 12·51 |
| 35 | 92·66 | ... | 3.03 | ... | 2·68 | 0·30 | 3·56 | 0·15 | 5·87 | 13·21 | 18·57 | 15·59 | 15·13 | 16·01 | 15·51 |
| 36 | 146·67 | ... | 0·14 | ... | 15·24 | 0·14 | 2·85 | ... | 7·97 | 25·37 | 27·85 | 26·34 | 9·92 | 11·16 | 10·39 |
| 37 | 168·75 | ... | ... | ... | 2·71 | ... | 1·02 | ... | 1·14 | 5·22 | 4·35 | 4·87 | 7·35 | 10·33 | 8·69 |
| Total | 139·29 | ... | 0·18 | ... | 6·59 | 0·05 | 0·79 | 0·16 | 1·33 | 9·42 | 8·67 | 9·08 | 10·55 | 10.05 | 10·33 |
| 38 | 157.92 | ... | 0·71 | ... | 6·41 | 0·30 | 3·38 | 0·10 | 1·01 | 12·97 | 10·55 | 11·91 | 12·65 | 11·99 | 12·36 |
| 39 | 141.91 | .. | 0·45 | ... | 9.69 | 0·06 | 6·28 | 0·33 | 2·15 | 19·90 | 17·77 | 18·96 | 13·79 | 12·69 | 13·30 |
| 40 | 133·46 | ... | 0·15 | ... | 13·43 | 0·40 | 3·02 | 0·16 | 1·98 | 20·41 | 17·67 | 19·14 | 13·57 | 11·58 | 12·65 |
| 41 | 140·74 | ... | 0·33 | ... | 8·03 | 0·22 | 2·40 | 0·33 | 2·66 | 15·28 | 12·56 | 14·02 | 13·18 | 12·05 | 12·65 |
| 42 | 144·93 | ... | 0·08 | ... | 6·62 | 0·20 | 3·60 | 0·28 | 2·61 | 14·55 | 12·00 | 13·39 | 15·07 | 13·39 | 14·30 |
| 43 | [illegible]0·44 | ... | 0·32 | ... | 10·15 | 0·20 | 3·94 | 0·18 | 2·32 | 18·96 | 15·00 | 17·11 | 14·97 | 13·57 | 14·30 |
| 44 | [illegible]3·98 | ... | ... | ... | 5·25 | 0·04 | 1·65 | 0·08 | 0·92 | 8·07 | 7·75 | 7·94 | 9·32 | 7·37 | 8·50 |
| 45 | [illegible]9·83 | ... | 0·41 | ... | 5·60 | 0·06 | 1·42 | 0·27 | 1·24 | 9·35 | 8·50 | 9·00 | 10·54 | 10·38 | 10·48 |
| 46 | [illegible]1·91 | ... | 0·24 | ... | 9·59 | 0·08 | 4·90 | 0·30 | 2·54 | 18·15 | 16·90 | 17·62 | 12·78 | 10·44 | 11·77 |
| 47 | [illegible]5·71 | ... | 0·48 | ... | 4·91 | 0·02 | 1·51 | 0·09 | 1·21 | 9·20 | 6·80 | 8·22 | 10·82 | 9·27 | 10·16 |
| 48 | [illegible]7·08 | ... | 0·33 | ... | 10·38 | 0·04 | 3·62 | 0·37 | 1·79 | 15·88 | 17·38 | 16·53 | 14·31 | 12·23 | 13·40 |
| 49 | [illegible]3·33 | ... | 0·26 | ... | 5·47 | ... | 6·77 | ... | 2·08 | 15·63 | 13·38 | 14·58 | 20·02 | 21·74 | 20·83 |
| 50 | [illegible]4·21 | ... | 2·36 | ... | 3·44 | 0·39 | 5·39 | 0·49 | 3·83 | 16·36 | 15·16 | 15·90 | 16·43 | 15·16 | 15·72 |
| Total | [illegible]2.49 | ... | 0·35 | ... | 8·28 | 0.16 | 3·23 | 0·22 | 1·87 | 14·81 | 13·21 | 14·11 | 12·82 | 11·44 | 12·21 |
| 51 | [illegible]4·52 | ... | 0·03 | ... | 8·01 | 0·04 | 0·52 | 0·21 | 1·82 | 11·36 | 9·79 | 10·63 | 11·61 | 10·95 | 11·29 |
| 52 | [illegible]4·36 | ... | 0·12 | ... | 9·23 | ... | 0·29 | 0·29 | 1·23 | 10·88 | 11·49 | 11·16 | 10·22 | 11·06 | 10·66 |
| 53 | [illegible]42 | ... | 0·31 | ... | 9·19 | 0·01 | 0·25 | 0·38 | 2·23 | 12·66 | 12·00 | 12·37 | 11·95 | 11·45 | 11·70 |
| 54 | [illegible]16 | ... | 0·15 | ... | 6·75 | ... | 0·16 | 0·27 | 1·09 | 8·44 | 8·40 | 8·42 | 10·38 | 10·57 | 10·46 |
| 55 | [illegible]04 | ... | ... | ... | 7·96 | ... | 0·17 | 0·09 | 1·27 | 9·89 | 8·98 | 9·49 | 11·88 | 12·03 | 11·93 |
| 56 | [illegible]98 | ... | 0·18 | ... | 9·58 | 0·02 | 0·12 | 0·21 | 1·43 | 12·19 | 10·79 | 11·54 | 15·06 | 15·03 | 15·02 |
| 57 | [illegible]51 | ... | 0·09 | ... | 7·49 | 0·12 | 0·12 | 0·12 | 0·87 | 8·35 | 9·40 | 8·81 | 11·58 | 11·57 | [illegible] |
| 58 | [illegible]10 | ... | ... | ... | 6·19 | 0·37 | 3·50 | 0·15 | 6·15 | 14·45 | 19·02 | 16·36 | | | |
| 59 | [illegible]00 | ... | ... | ... | 9·47 | ... | 1·03 | 0·31 | 3·19 | [illegible] | | | | | |
| 60 | [illegible]75 | ... | ... | ... | 13·73 | ... | | | | | | | | | |
| Total | [illegible] | ... | 0·12 | | | | | | | | | | | | |

| 1 | 2 | 3 | 4 | 5 | | | 6 | | 7 | | | 8 | 9 | | | | | | | | | | | 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Population (Census, 1931). | | | Births. | | Number of deaths registered. | | | Number of deaths of males to every 100 deaths of females. | Deaths per 1,000 of population from | | | | | | | | All causes. | | | Mean ratio of deaths per 1,000 during previous five years. | | |
| Serial number. | Districts. | Area in square miles. | Average population per square mile. | Male. | Female. | Total. | Total number. | Birth rate per 1,000 of population. | Male. | Female. | Total. | | Cholera. | Small-pox. | Plague. | Fevers. | Dysentery and Diarrhœa. | Respiratory diseases. | Injuries. | All other causes. | Male. | Female. | Total | Male. | Female. | Total. |
| 61 | Kotri ... R. C. ... | 1,496 | 22 | 16,913 | 14,198 | 31,111 | 533 | 17·13 | 167 | 139 | 306 | 120·15 | ... | 0·32 | ... | 6·91 | 0·10 | 0·77 | ... | 1·74 | 9·87 | 9·79 | 9·84 | 13·54 | 12·88 | 13·37 |
| 62 | Kohistan ... " ... | 1,8[illegible]6 | 9 | 9,334 | 8,010 | 17,374 | 187 | 10·76 | 67 | 77 | 144 | 87·01 | ... | 1·27 | ... | 2·25 | 0·35 | 1·55 | 0·06 | 2·82 | 7·17 | 9·57 | 8·30 | 6·96 | 7·34 | 7·14 |
| 63 | Sehwan ... " ... | 1,273 | 35 | 21,939 | 17,352 | 39,291 | 835 | 21·25 | 284 | 248 | 532 | 114·52 | ... | 1·02 | ... | 9·57 | 0·02 | 1·38 | 0·18 | 2·37 | 12·95 | 14·29 | 13·54 | 14·35 | 14·52 | 14·43 |
| 64 | Johi ... ... " ... | 755 | 68 | 28.330 | 23,118 | 51,448 | 676 | 13·14 | 242 | 234 | 476 | 103·42 | ... | 6·33 | ... | 7·49 | 0·04 | 0·58 | 0·19 | 0·62 | 10·38 | 8·04 | 9·25 | 11·58 | 10·86 | 11·25 |
| 65 | Dadu ... " ... | 297 | 194 | 29,563 | 21,424 | 50,987 | 753 | 14·77 | 222 | 187 | 409 | 118·72 | ... | ... | ... | 6·69 | 0·06 | 0·34 | 0·19 | 0·74 | 7·51 | 8·72 | 8.02 | 8·96 | 9·05 | 9·00 |
| 66 | Kakar ... " ... | 448 | 108 | 26,697 | 21,751 | 48,448 | 1,052 | 21·71 | 295 | 200 | 495 | 147·50 | ... | ... | ... | 8·61 | 0·06 | 0·21 | 0·37 | 1·07 | 11·05 | 9·20 | 10·22 | 11·42 | 10·85 | 11·14 |
| 67 | Mehar ... " ... | 364 | ... | 39,753 | 30,734 | 70,487 | 1,458 | 20·68 | 243 | 220 | 463 | 110·46 | ... | 0·14 | ... | 5·14 | 0·01 | 0·16 | 0·14 | 0·98 | 6·11 | 7·15 | 6·57 | 9·72 | 10·66 | 10·14 |
| 68 | Kotri ... T. C. ... | ... | ... | 6,203 | 3,831 | 10,033 | 150 | 14·95 | 59 | 48 | 107 | 122·92 | ... | 0·50 | ... | 5·58 | 0·30 | 2·00 | ... | 2·29 | 9·51 | 12·53 | 10·67 | 10·00 | 10·44 | 10·17 |
| 69 | Sehwan ... " ... | ... | ... | 3,518 | 2,277 | 5,795 | 64 | 11·04 | 22 | 16 | 38 | 137·50 | ... | ... | ... | 1·55 | 0·17 | 2·25 | 0·17 | 2·42 | 6·25 | 7·02 | 6·56 | 7·96 | 10·10 | 8·80 |
| 70 | Dadu ... " ... | ... | ... | 3,428 | 3,134 | 6,562 | 125 | 19·06 | 44 | 20 | 64 | 220·00 | ... | 0·15 | ... | 5·03 | 0·30 | 1·99 | 0·15 | 2·14 | 12·84 | 6·40 | 9·76 | 7·58 | 7·34 | 7·46 |
| 71 | Manjhand ... " ... | ... | ... | 1,394 | 1,352 | 2,746 | 84 | 30·59 | 33 | 19 | 62 | 113·45 | ... | 0·37 | ... | 15·29 | ... | 2·91 | ... | 4·01 | 23·67 | 21·45 | 22·58 | 17·22 | 13·31 | 15·29 |
| | Total, Dadu District ... | 6,439 | 51 | 187,071 | 147,211 | 334,282 | 5,917 | 17·70 | 1,678 | 1,418 | 3,096 | 118·34 | ... | 0·20 | ... | 6·81 | 0·08 | 0·69 | 0·16 | 1·35 | 8·97 | 9·63 | 9·29 | 10·37 | 10·21 | 10·30 |
| 72 | Sukkur ... R. C. ... | 267 | 248 | 36,661 | 29,689 | 66,350 | 1,819 | 27·41 | 527 | 363 | 890 | 145·18 | ... | ... | ... | 8·50 | 0·11 | 0·72 | 1·27 | 2·81 | 14·37 | 12·23 | 13·41 | 17·98 | 19·63 | 18·72 |
| 73 | Shikarpur ... " ... | 298 | 147 | 40,421 | 32,998 | 73,419 | 1,385 | 18·86 | 348 | 306 | 654 | 113·73 | ... | 0·03 | ... | 7·15 | 0·01 | 0·08 | 0·08 | 1·56 | 8·61 | 9·27 | 8·91 | 13·26 | 13·73 | 13·47 |
| 74 | Rohri ... " ... | 1,629 | 48 | 43,830 | 33,996 | 77,826 | 802 | 10·30 | 244 | 150 | 394 | 162·67 | ... | ... | ... | 3·81 | 0·02 | 0·37 | 0·32 | 0·58 | 5·57 | 4·41 | 5·10 | 7·75 | 7·50 | 7·63 |
| 75 | Garhi Yasin ... " ... | 402 | 171 | 33,519 | 27,785 | 61,304 | 1,372 | 22·38 | 408 | 317 | 725 | 128·71 | ... | ... | ... | 9·33 | 0·03 | 0·43 | 0·60 | 1·43 | 12·17 | 11·41 | 11·82 | 17·42 | 18·46 | 17·89 |
| 76 | Ghotki ... " ... | 341 | 137 | 23,221 | 18,792 | 42,013 | 912 | 21·71 | 281 | 185 | 466 | 151·87 | ... | ... | ... | 9.15 | 0·05 | 0·31 | 0·19 | 1·39 | 12·10 | 9·84 | 11·09 | 14·46 | 14·31 | 14·40 |
| 77 | Pano Akil ... " ... | 393 | 120 | 26,104 | 21,183 | 47,287 | 1,148 | 24·26 | 260 | 199 | 459 | 130·65 | ... | ... | ... | 8·02 | 0·03 | 0·28 | 0·40 | 0·97 | 9·96 | 9·39 | 9·70 | 14·25 | 13·60 | 13·96 |
| 78 | Mirpur Mathelo ... " ... | 1,604 | 30 | 26,742 | 21,814 | 28,556 | 946 | 19·47 | 267 | 175 | 443 | [illegible]52·57 | ... | 0·05 | ... | 7·25 | 0·05 | 0·45 | 0·05 | 1·25 | 9·98 | 8·02 | 9·10 | 15·22 | 14·86 | 15·05 |
| 79 | Ubauro ... " ... | 462 | 100 | 25,289 | 20,857 | 46,146 | 967 | 20·95 | 255 | 224 | 479 | [illegible]13·84 | ... | 0·05 | ... | 8.20 | 0·11 | 0·55 | 0·30 | 1·17 | 10·08 | 10·74 | 10·38 | 15·66 | 15·68 | 15·67 |
| 80 | Sukkur ... T. C. ... | 3 | 23,092 | 43,282 | 25,995 | 69,277 | 2,590 | 37·39 | 521 | 326 | 847 | [illegible]9·82 | ... | ... | ... | 1·71 | 2·85 | 3·68 | 0·49 | 3·51 | 12·03 | 12·54 | 12·24 | 12·57 | 15·34 | 13·61 |
| 81 | Shikarpur ... " ... | 9 | 6,745 | 33,744 | 28,761 | 62,505 | 2,179 | 34·86 | 715 | 654 | 1,369 | [illegible]0·33 | ... | ... | ... | 8·50 | 0·27 | 2·67 | 0·66 | 9·80 | 21·18 | 22·73 | 21·90 | 23·47 | 25·28 | 24·30 |
| 82 | Rohri ... " ... | ... | ... | 10,159 | 6,741 | 16,900 | 382 | 22·60 | 98 | 65 | 163 | [illegible]0·77 | ... | .. | ... | 4·26 | 0·65 | 2·18 | 0·47 | 2·08 | 9·64 | 9·64 | 9·64 | 11.22 | 13·65 | 12·18 |
| 83 | Garhi Yasin ... " ... | ... | ... | 3,761 | 3,609 | 7,370 | 288 | 39·07 | 79 | 65 | 144 | [illegible]1·54 | ... | ... | ... | 10·45 | 0·14 | 1·49 | 1·49 | 5·97 | 21·00 | 18·00 | 19·54 | 24·19 | 25·49 | 24·83 |
| 84 | Ghotki ... " ... | ... | ... | 2,519 | 2,247 | 4,826 | 244 | 50·56 | 72 | 84 | 156 | [illegible]5·72 | ... | 0·21 | ... | 21·13 | 3·31 | 4·77 | 0·21 | 2·69 | 27·91 | 37·38 | 32·32 | 31·02 | 41·39 | 35·85 |
| | Total, Sukkur District ... | 5,608 | 111 | 349,312 | 274,467 | 623,779 | 15,034 | 24·10 | 4,075 | 3,113 | 7,188 | [illegible]0·90 | ... | 0·01 | ... | 7·00 | 0·13 | 1·06 | 0·46 | 2·56 | 11·66 | 11·34 | 11·52 | 13·81 | 14·52 | 14·15 |
| 85 | Jacobabad ... R. C. ... | 254 | 157 | 22,272 | 17,590 | 39,862 | 518 | 12·99 | 148 | 103 | 251 | [illegible]3·98 | ... | ... | ... | 5·22 | 0·03 | 0·15 | 0·18 | 0·73 | 6·65 | 5·86 | 6·31 | 7·99 | 7·16 | 7·63 |
| 86 | Garhi Khairo ... " ... | 273 | 135 | 20,624 | 16,857 | 37,481 | 650 | 17·31 | 218 | 156 | 374 | [illegible]9·75 | ... | ... | ... | 8·19 | 0.03 | 0·43 | 0·29 | 1·04 | 10·57 | 9·25 | 9·98 | 8·15 | 9·25 | 8·64 |
| 87 | Kandhkot ... " ... | 542 | 119 | 36,229 | 28,296 | 64,525 | 616 | 9·55 | 171 | 131 | 302 | [illegible]0·54 | ... | ... | ... | 3·95 | ... | 0·06 | 0·11 | 0·56 | 4·72 | 4·63 | 4·68 | 7·20 | 6·26 | 6·78 |
| 88 | Thul ... ... " ... | 497 | 63 | 34,041 | 27,262 | 61,303 | 1,134 | 18·50 | 303 | 237 | 540 | [illegible]7·85 | ... | 0.03 | ... | 7·63 | 0·02 | 0·08 | 0·13 | 0·91 | 8·90 | 8·70 | 8·80 | 9·11 | 9·46 | 9·27 |
| 89 | Kashmor ... " ... | 543 | 76 | 22,962 | 18,445 | 41,407 | 464 | 11·20 | 137 | 85 | 223 | [illegible]1·18 | ... | ... | ... | 4·44 | 0·03 | 0·14 | 0·10 | 0·65 | 5·96 | 4·60 | 5·36 | 8·36 | 7·64 | 8·04 |
| 90 | Jacobabad ... T. C. ... | ... | ... | 9,460 | 6,288 | 15,748 | 164 | 10·41 | 67 | 29 | 96 | [illegible]1·04 | ... | ... | ... | 4·19 | 0·25 | 0·52 | 0·19 | 0·95 | 7·08 | 4·91 | 6·10 | 7·61 | 9·22 | 8·75 |
| | Total, Upper Sind Frontier District | 2,109 | 123 | 145,588 | 114,738 | 260,360 | 3,446 | 13·62 | 1,044 | 741 | 1,785 | [illegible]·89 | ... | 0·01 | ... | 5·71 | 0·03 | 0·18 | 0·16 | 0·77 | 7·17 | 6·54 | 6·86 | 8·13 | 7·98 | 8·06 |
| | Total of all Town Circles ... | 94 | 265 | 396,171 | 289,031 | 685,202 | 27,952 | 40·79 | 7,578 | 6,203 | 13,781 | [illegible]·17 | ... | 0·19 | ... | 3·66 | 1·42 | 6·31 | 0·42 | 8·11 | 19·13 | 21·46 | 20·11 | 19·69 | 22·12 | 20·72 |
| | Total of all Rural Circles ... | 46,569 | 69 | 1,776,731 | 1,414,455 | 3,19,1186 | 52,994 | 16·61 | 17,816 | 13,182 | 30,[illegible] | [illegible]·16 | ·001 | ·14 | ... | 6·73 | 0·06 | 1·29 | 0·21 | 1·29 | 10·03 | 9·32 | 9·72 | 10·78 | 10·24 | 10·53 |
| | Grand Total of the Province ... | 46,663 | 83 | 217,[illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 19,385 | 44,77[illegible] | [illegible]0 | ·0008 | ·15 | ... | 6·18 | ·30 | 2·18 | ·25 | 2·40 | 11·69 | 11·38 | 11·55 | 12·40 | 12·26 | 12·34 |

APPENDIX III—*contd.*

FORM NO. II—*concld.*

| District and Towns. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total deaths registered during the year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B.—Towns.—*contd.* | | | | | | | | | | | | | |
| *Dadu District.* | | | | | | | | | | | | | |
| Kotri ... ... ... ... T. C. ... | 8 | 7 | 2 | 10 | 12 | 11 | 5 | 7 | 6 | 12 | 10 | 17 | 107 |
| Dadu... ... ... ... ,, ... | 4 | 10 | 7 | 1 | 2 | 6 | 7 | 4 | 6 | 1 | 6 | 10 | 64 |
| Sehwan ... ... ... ,, ... | 7 | 4 | 6 | 5 | 3 | 4 | 1 | ... | ... | 2 | 3 | 3 | 38 |
| Manjhand ... ... ... ,, ... | 7 | 5 | 10 | 13 | 4 | 3 | 8 | 3 | 1 | 1 | 4 | 3 | 62 |
| *Sukkur District.* | | | | | | | | | | | | | |
| Sukkur ... ... ... T. C. ... | 91 | 84 | 69 | 63 | 86 | 63 | 59 | 70 | 63 | 72 | 63 | 64 | 847 |
| Shikarpur ... ... ... ,, ... | 159 | 108 | 92 | 82 | 102 | [illegible]01 | 101 | 75 | 80 | 78 | 179 | 212 | 1,369 |
| Rohri ... ... ... ... ,, ... | 22 | 22 | 14 | 11 | 12 | 8 | 13 | 8 | 12 | 9 | 17 | 15 | 163 |
| Garhi Yasin ... ... ... ,, ... | 28 | 6 | 4 | 4 | 13 | 8 | 13 | 17 | 4 | 9 | 22 | 16 | 144 |
| Ghotki ... ... ... ,, ... | 16 | 11 | 9 | 11 | 9 | 12 | 7 | 14 | 9 | 16 | 26 | 16 | 156 |
| *Upper Sind Frontier District.* | | | | | | | | | | | | | |
| Jacobabad ... ... ... T. C. ... | 14 | 8 | 4 | 10 | 4 | 5 | 7 | 5 | 14 | 6 | 8 | 11 | 96 |
| Total for towns ... | 1,513 | 1,144 | 1,109 | 1,091 | 1,128 | 1,[illegible]33 | 1,009 | 992 | 900 | 990 | 1,328 | 1,514 | 13,751 |
| Ratio per mile of population ... | 2·25 | 1·67 | 1·62 | 1·59 | 1·65 | 1[illegible]51 | 1·47 | 1·45 | 1·31 | 1·44 | 1·94 | 2·21 | 20·11 |
| Total for the province ... | 5,397 | 4,672 | 4,265 | 3,632 | 3,425 | 2,[illegible]19 | 2,815 | 2,751 | 2,727 | 3,330 | 4,246 | 4,600 | 44,779 |
| Ratio per mile of population ... | 1·39 | 1·21 | 1·10 | ·94 | ·88 | ·75 | ·72 | ·71 | ·70 | ·86 | 1·10 | 1·19 | 11·55 |

## APPENDIX III.—*contd.*

### FORM No. IV.

*Annual deaths registered according to age in the districts (rural circles) and towns of the Province of Sind during the year 1939.*

| Districts and Towns. | Under one year. | | | | | | |
|---|---|---|---|---|---|---|---|
| | Not exceeding one month. | | | | | | Total. |
| | Male. | | | Female. | | | |
| | Under one week. | Over one week. | Total. | Under one week. | Over one week. | Total. | |
| **A—DISTRICTS (EXCLUDING TOWNS).** | | | | | | | |
| Karachi ... ... ... ... | 69 | 62 | 131 | 48 | 39 | 87 | 218 |
| Hyderabad ... ... ... | 55 | 68 | 123 | 44 | 56 | 100 | 223 |
| Nawabshah ... ... ... | 87 | 88 | 175 | 58 | 43 | 101 | 276 |
| Thar Parkar ... ... ... | 108 | 68 | 176 | 94 | 60 | 154 | 330 |
| Larkana... ... ... ... | 93 | 95 | 188 | 64 | 59 | 123 | 311 |
| Dadu ... ... ... ... | 48 | 34 | 82 | 46 | 41 | 87 | 169 |
| Sukkur ... ... ... ... | 103 | 119 | 222 | 69 | 62 | 131 | 353 |
| Upper Sind Frontier ... ... | 12 | 27 | 39 | 14 | 25 | 39 | 78 |
| Total Districts (excluding Towns) ... | 575 | 561 | 1,136 | 437 | 385 | 822 | 1,958 |
| **B.—TOWNS.** | | | | | | | |
| *Karachi District.* | | | | | | | |
| Karachi ... ... T. C. ... | 250 | 173 | 423 | 185 | 129 | 314 | 737 |
| Karachi ... ... C. C. ... | 7 | 6 | 13 | 1 | ... | 1 | 14 |
| Drigh Road ... ... ,, ... | ... | ... | ... | 1 | ... | 1 | 1 |
| Tatta ... ... ... T. C. ... | 1 | ... | 1 | 1 | ... | 1 | 2 |
| *Hyderabad District.* | | | | | | | |
| Hyderabad ... ... T. C. ... | 83 | 62 | 145 | 71 | 63 | 134 | 279 |
| Hyderabad ... ... C. C. ... | 1 | ... | 1 | ... | ... | ... | 1 |
| Hala ... ... ... T. C. ... | 4 | 7 | 11 | ... | 1 | 1 | 12 |
| Matiari ... ... ... ,, ... | 1 | 1 | 2 | ... | ... | ... | 2 |
| Tando Muhammadkhan ... ,, ... | 3 | 1 | 3 | 2 | ... | 2 | 5 |
| Tando Allahyar ... ... ,, ... | ... | 1 | 1 | ... | ... | ... | 1 |
| Nasarpur ... ... ,, ... | 1 | ... | 1 | 1 | 1 | 2 | 3 |
| *Nawabshah District.* | | | | | | | |
| Nawabshah ... ... T. C. ... | 10 | 7 | 17 | 8 | 7 | 15 | 32 |
| Tando Adam ... ... ,, ... | 1 | 3 | 4 | 1 | 7 | 8 | 12 |
| Shahdadpur ... ... ,, ... | 1 | 1 | 2 | ... | ... | ... | 2 |
| *Thar Parkar District.* | | | | | | | |
| Mirpurkhas ... ... T. C. ... | 1 | 1 | 2 | ... | 4 | 4 | 6 |
| Umarkot ... ... ,, ... | 1 | 1 | 2 | .. | ... | ... | 2 |
| *Larkana District.* | | | | | | | |
| Larkana ... ... T. C. ... | 4 | 17 | 21 | 4 | 14 | 18 | 39 |
| Kambar ... ... ,, ... | 2 | 5 | 7 | 5 | 1 | 6 | 13 |
| Ratodero ... ... ,, ... | 1 | 4 | 5 | ... | ... | ... | 5 |

| Districts and Towns. | Under one year—*contd.* | | | | | | | | | One and under five years. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Over one month and not exceeding six months. | | | Over six months and not exceeding twelve months. | | | Total. | | | | |
| | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female | Total. | Male. | Female |
| **A—DISTRICTS (EXCLUDING TOWNS).** | | | | | | | | | | | |
| Karachi | 95 | 77 | 172 | 46 | 42 | 88 | 272 | 206 | 478 | 201 | 166 |
| Hyderabad | 122 | 95 | 217 | 60 | 37 | 97 | 305 | 232 | 537 | 271 | 272 |
| Nawabshah | 108 | 80 | 188 | 48 | 40 | 88 | 331 | 221 | 552 | 321 | 225 |
| Thar Parkar | 177 | 134 | 311 | 79 | 57 | 136 | 432 | 345 | 777 | 415 | 326 |
| Larkana | 163 | 108 | 271 | 71 | 87 | 158 | 422 | 318 | 740 | 391 | 356 |
| Dadu | 96 | 91 | 187 | 38 | 34 | 72 | 216 | 212 | 428 | 243 | 213 |
| Sukkur | 211 | 164 | 375 | 82 | 89 | 171 | 515 | 384 | 899 | 372 | 345 |
| Upper Sind Frontier | 60 | 49 | 109 | 50 | 29 | 79 | 149 | 117 | 256 | 204 | 163 |
| Total Districts (excluding Towns) | 1,032 | 798 | 1,830 | 474 | 415 | 889 | 2,642 | 2,035 | 4,677 | 2,418 | 2,066 |
| **B.—TOWNS.** | | | | | | | | | | | |
| *Karachi District.* | | | | | | | | | | | |
| Karachi T. C. | 360 | 336 | 696 | 293 | 242 | 535 | 1,076 | 892 | 1,968 | 617 | 553 |
| Karachi C. C. | 8 | 3 | 11 | 2 | 6 | 8 | 23 | 10 | 33 | 6 | 7 |
| Drigh Road | 1 | ... | 1 | ... | ... | ... | 1 | 1 | 2 | 1 | 2 |
| Tatta T. C. | 3 | 3 | 6 | 3 | 3 | 6 | 7 | 7 | 14 | 7 | 2 |
| *Hyderabad District.* | | | | | | | | | | | |
| Hyderabad T. C. | 108 | 97 | 205 | 122 | 130 | 252 | 375 | 361 | 736 | 176 | 163 |
| Hyderabad C. C. | ... | 1 | 1 | ... | ... | ... | 1 | 1 | 2 | 3 | 2 |
| Hala T. C. | 3 | 6 | 9 | 2 | ... | 2 | 16 | 7 | 23 | 10 | 4 |
| Matiari | 3 | 1 | 4 | 2 | 1 | 3 | 7 | 2 | 9 | 6 | 10 |
| Tando Muhammadkhan | 4 | 5 | 9 | 2 | 1 | 3 | 9 | 8 | 17 | 19 | 11 |
| Tando Allahyar | 3 | ... | 3 | 1 | 2 | 3 | 5 | 2 | 7 | 5 | ... |
| Nasarpur | 1 | 1 | 2 | ... | ... | ... | 2 | 3 | 5 | 2 | 1 |
| *Nawabshah District.* | | | | | | | | | | | |
| Nawabshah T. C. | 8 | 10 | 18 | 8 | 7 | 15 | 33 | 32 | 65 | 29 | 21 |
| Tando Adam | 8 | 10 | 18 | 6 | 7 | 13 | 18 | 25 | 43 | 17 | 16 |
| Shahdadpur | ... | ... | ... | ... | ... | ... | 2 | ... | 2 | 8 | |
| *Thar Parkar District.* | | | | | | | | | | | |
| Mirpurkhas T. C. | 4 | 3 | 7 | 3 | 1 | 4 | 9 | 8 | 17 | 14 | 7 |
| Umarkot | 2 | 1 | 3 | 1 | ... | 1 | 5 | 1 | 6 | 1 | 6 |
| *Larkana District.* | | | | | | | | | | | |
| Larkana T. C. | 21 | 13 | 34 | 11 | 14 | 25 | 53 | 45 | 98 | 33 | 41 |
| Kambar | 6 | 4 | 10 | 6 | 6 | 12 | 19 | 16 | 35 | 7 | 7 |
| Ratodero | 5 | 5 | 10 | 8 | 2 | 10 | 18 | 7 | 25 | 6 | 10 |

APPENDIX III—*contd.*

FORM No. IV—*contd.*

| Districts and Towns. | Five and under ten years | | Ten and under 15 years. | | 15 and under 20 years. | | 20 and under 30 years. | | 30 and under 40 years. | | 40 and under 50 years. | | 50 and under 60 years. | | 60 years and upwards. | | Ages not known. | | Total (all ages.) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| **A—DISTRICTS (EXCLUDING TOWNS)—*contd.*** | | | | | | | | | | | | | | | | | | | | |
| Karachi ... ... ... | 92 | 63 | 50 | 45 | 50 | 61 | 180 | 163 | 190 | 188 | 173 | 119 | 141 | 88 | 274 | 140 | ... | ... | 1,623 | 1,239 |
| Hyderabad ... ... ... | 164 | 131 | 90 | 79 | 84 | 69 | 287 | 248 | 325 | 254 | 338 | 172 | 236 | 119 | 463 | 237 | ... | ... | 2,563 | 1,813 |
| Nawabshah ... ... ... | 157 | 129 | 103 | 78 | 87 | 75 | 249 | 248 | 250 | 256 | 251 | 137 | 236 | 89 | 404 | 228 | ... | ... | 2,389 | 1,656 |
| Thar Parkar ... ... ... | 219 | 167 | 174 | 120 | 173 | 122 | 399 | 348 | 410 | 331 | 416 | 255 | 390 | 174 | 715 | 454 | ... | ... | 3,743 | 2,642 |
| Larkana ... ... ... | 175 | 139 | 115 | 84 | 85 | 65 | 201 | 227 | 212 | 183 | 201 | 143 | 200 | 113 | 409 | 238 | ... | ... | 2,411 | 1,866 |
| Dadu ... ... ... | 116 | 108 | 60 | 50 | 42 | 61 | 136 | 170 | 135 | 152 | 139 | 90 | 154 | 71 | 279 | 178 | ... | ... | 1,520 | 1,305 |
| Sukkur ... ... ... | 137 | 110 | 94 | 64 | 76 | 76 | 200 | 224 | 208 | 209 | 213 | 134 | 215 | 120 | 530 | 253 | ... | ... | 2,590 | 1,919 |
| Upper Sind Frontier ... ... | 84 | 66 | 43 | 42 | 31 | 30 | 75 | 74 | 86 | 71 | 74 | 35 | 60 | 29 | 171 | 85 | ... | ... | 977 | 712 |
| Total ... | 1,144 | 913 | 729 | 562 | 6:8 | 559 | 1,727 | 1,702 | 1,516 | 1,644 | 1,835 | 1,085 | 1,632 | 803 | 3,245 | 1,813 | ... | ... | 17,816 | 13,182 |
| **B—TOWNS—*contd.*** | | | | | | | | | | | | | | | | | | | | |
| ***Karachi District.*** | | | | | | | | | | | | | | | | | | | | |
| Karachi ... ... T. C. ... | 85 | 91 | 68 | 62 | 78 | 115 | 242 | 315 | 265 | 209 | 275 | 126 | 281 | 93 | 467 | 385 | ... | ... | 3,404 | 2,843 |
| Karachi ... ... C. C. ... | 1 | 2 | 3 | 2 | 1 | 2 | 3 | 4 | 8 | 3 | 4 | 1 | 5 | 1 | 14 | 10 | ... | ... | 68 | 42 |
| Drigh Road ... ... ,, ... | ... | 1 | ... | ... | ... | 1 | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 6 |
| Tatta ... ... ... T. C. | 1 | ... | ... | ... | 3 | 3 | 5 | 1 | 3 | 1 | 5 | 5 | 6 | ... | 9 | 8 | ... | ... | 46 | 27 |
| ***Hyderabad District.*** | | | | | | | | | | | | | | | | | | | | |
| Hyderabad ... ... T. C. ... | 41 | 46 | 24 | 31 | 45 | 59 | 141 | 109 | 122 | 68 | 135 | 71 | 134 | 167 | 186 | 190 | ... | ... | 1,379 | 1,165 |
| Hyderabad ... .. C. C. ... | ... | ... | 2 | ... | 1 | ... | 2 | 3 | ... | 1 | 2 | 2 | ... | 3 | 5 | ... | ... | ... | 16 | 12 |
| Hala ... ... ... T. C. ... | ... | ... | 1 | ... | 1 | 3 | 4 | 3 | 2 | 1 | 2 | 4 | 2 | 1 | 11 | 3 | ... | ... | 49 | 26 |
| Matiari ... ... ... ,, ... | 1 | 3 | 3 | 2 | 2 | 3 | 3 | 7 | 7 | 2 | 3 | 3 | 3 | ... | 14 | 9 | ... | ... | 49 | 40 |
| Tando Muhammadkhan ... ,, ... | 3 | 2 | 1 | 4 | 1 | ... | 7 | 5 | 8 | 2 | 6 | 2 | 1 | 4 | 10 | 6 | ... | ... | 65 | 44 |
| Nasarpur ... ... ,, ... | 2 | ... | 1 | 1 | ... | 1 | 3 | 4 | 6 | 3 | 12 | 4 | 4 | 1 | 7 | 6 | ... | ... | 45 | 22 |
| Tando Allahyar ... ... ,, ... | ... | 1 | ... | 1 | ... | 3 | 2 | 1 | 2 | 2 | 7 | 1 | 3 | 3 | 7 | 4 | ... | ... | 25 | 19 |
| ***Nawabshah District.*** | | | | | | | | | | | | | | | | | | | | |
| Nawabshah ... ... T. C. ... | 3 | 4 | 3 | 1 | 5 | 1 | 6 | 4 | 5 | 3 | 8 | 2 | 11 | 2 | 7 | 5 | ... | ... | 110 | 75 |
| Tando Adam ... ... ,, ... | 10 | 5 | 4 | 7 | 5 | 11 | 2 | 12 | 2 | 5 | 16 | 4 | 14 | 8 | 13 | 16 | ... | ... | 101 | 109 |
| Shahdadpur ... ... ,, ... | 2 | 1 | 1 | 2 | ... | 1 | 1 | 3 | 5 | 2 | 5 | 1 | 2 | 1 | 1 | 3 | ... | ... | 27 | 16 |
| ***Thar Parkar District.*** | | | | | | | | | | | | | | | | | | | | |
| Mirpurkhas ... ... T. C. ... | 10 | 9 | 2 | 5 | 3 | 4 | 22 | 9 | 12 | 4 | 6 | 2 | 16 | 1 | 11 | 8 | ... | ... | 105 | 57 |
| Umarkot ... ... ,, ... | 2 | 1 | 1 | ... | 2 | ... | 8 | 6 | 2 | 4 | 5 | 3 | 3 | 2 | 3 | 1 | ... | ... | 32 | 24 |
| ***Larkana District.*** | | | | | | | | | | | | | | | | | | | | |
| Larkana ... ... T. C. ... | 6 | 9 | 5 | 3 | 8 | 14 | 13 | 27 | 21 | 18 | 36 | 16 | 19 | 11 | 32 | 29 | ... | ... | 226 | 213 |
| Kambar... ... ... ,, .. | 6 | 10 | 3 | 2 | 1 | 3 | 2 | 5 | 4 | 8 | 7 | 4 | 4 | 3 | 15 | 10 | ... | ... | 68 | 68 |
| Ratodero ... ... ,, ... | ... | 5 | 1 | ... | 1 | 3 | 1 | 8 | 4 | 9 | 4 | 2 | 6 | 2 | 9 | 13 | ... | ... | 50 | 59 |

# APPENDIX III—*contd.*

## FORM No. IV—*concld.*

| Districts and Towns. | Five and under ten years. | | Ten and under 15 years. | | 15 and under 20 years. | | 20 and under 30 years. | | 30 and under 40 years. | | 40 and under 50 years. | | 50 and under 60 years. | | 60 years and upwards. | | Ages not known. | | Total (all ages). | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. |
| **B.—TOWNS—*concld.*** | | | | | | | | | | | | | | | | | | | | |
| *Dadu District.* | | | | | | | | | | | | | | | | | | | | |
| Kotri ... ... ... T. C. ... | ... | 3 | 2 | ... | 1 | ... | 5 | 4 | 3 | 5 | 5 | 3 | 6 | 2 | 9 | 12 | ... | ... | 59 | 48 |
| Dadu ... ... ... " ... | 1 | 3 | 2 | 3 | 2 | ... | 1 | 4 | 3 | ... | 3 | 1 | 8 | ... | 13 | 4 | ... | ... | 44 | 20 |
| Sehwan ... ... ... " ... | ... | 1 | ... | ... | 1 | ... | ... | 4 | 5 | 1 | 4 | 2 | 4 | 1 | 3 | 2 | ... | ... | 22 | 16 |
| Manjhand ... ... " ... | 3 | 4 | 1 | ... | 1 | 1 | 1 | 2 | 3 | 3 | ... | ... | 1 | 2 | 11 | 3 | ... | ... | 33 | 29 |
| *Sukkur District.* | | | | | | | | | | | | | | | | | | | | |
| Sukkur ... ... ... T. C. ... | 19 | 14 | 16 | 21 | 22 | 6 | 40 | 32 | 52 | 20 | 57 | 18 | 48 | 11 | 83 | 58 | ... | ... | 521 | 326 |
| Shikarpur ... ... " ... | 21 | 12 | 13 | 21 | 30 | 39 | 41 | 86 | 43 | 43 | 68 | 31 | 61 | 14 | 150 | 142 | ... | ... | 715 | 654 |
| Rohri ... ... ... " ... | 7 | 1 | ... | 4 | ... | 1 | 5 | 6 | 12 | 9 | 11 | 4 | 23 | 4 | 21 | 16 | ... | ... | 98 | 65 |
| Garhi Yasin ... ... " ... | 2 | 2 | 3 | 1 | ... | 3 | 6 | 11 | 10 | 3 | 5 | 2 | 4 | 4 | 14 | 6 | ... | ... | 79 | 65 |
| Ghotki ... ... ... " ... | 5 | 3 | 2 | 2 | 1 | 6 | ... | 9 | 4 | 6 | 3 | 4 | 9 | 5 | 6 | 6 | ... | ... | 72 | 84 |
| *Upper Sind Frontier District.* | | | | | | | | | | | | | | | | | | | | |
| Jacobabad ... ... T. C. ... | 1 | ... | 2 | 2 | 2 | 1 | 6 | 8 | 5 | 4 | 9 | 2 | 11 | 2 | 22 | 6 | ... | ... | 67 | 29 |
| Total for towns ... | 1,144 | 813 | 729 | 562 | 628 | 559 | 1,727 | 1,702 | 1.816 | 1,644 | 1,835 | 1,085 | 1,632 | 803 | 3,245 | 1,813 | ... | ... | 17,816 | 13,182 |
| Total for the province ... | 1,376 | 1,146 | 893 | 739 | 845 | 843 | 2,209 | 2,395 | 2,435 | 2,092 | 2,538 | 1,404 | 2,271 | 1,051 | 4,398 | 2,777 | ... | ... | 25,394 | 19,385 |
| Ratio per mille of population ... | 4·81 | 5·14 | 3·62 | 4·26 | 4·47 | 5·72 | 5·38 | 6·94 | 7·00 | 8·47 | 12·13 | 9·48 | 21·76 | 13·38 | 64·93 | 49·25 | ... | ... | 11·69 | 11·38 |

# APPENDIX III—*contd.*

## ANNUAL FORM No. V.

Deaths registered according to classes and sex in the Province of Sind during the year 1939.

| 1 | 2 | 3 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NUMBER OF DEATHS REGISTERED | | | | | | | | | | | | | | |
| No. | Districts. | Muhammadans. | | Hindus. | | Jains. | | Christians. | | Parsis. | | Other Classes. | | Total. | | |
| | | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Total. |
| 1 | Karachi ... ... ... | 3,225 | 2,523 | 1,802 | 1,550 | .. | ... | 85 | 59 | 20 | 17 | 12 | 8 | 5,144 | 4,157 | 9,301 |
| 2 | Hyderabad ... ... ... | 2,586 | 1,759 | 1,601 | 1,380 | 1 | ... | 3 | 1 | ... | ... | ... | 1 | 4,191 | 3,141 | 7,332 |
| 3 | Nawabshah ... ... ... | 1,920 | 1,319 | 704 | 565 | ... | ... | 1 | 1 | ... | ... | 2 | 1 | 2,627 | 1,886 | 4,513 |
| 4 | Thar Parkar ... ... ... | 2,124 | 1,520 | 1,749 | 1,197 | ... | ... | ... | ... | ... | ... | 7 | 6 | 3,880 | 2,723 | 6,603 |
| 5 | Larkana ... ... ... | 2,152 | 1,686 | 602 | 520 | ... | ... | ... | ... | ... | ... | 1 | ... | 2,755 | 2,206 | 4,961 |
| 6 | Dadu ... ... ... | 1,331 | 1,086 | 346 | 332 | ... | ... | 1 | ... | ... | ... | ... | ... | 1,678 | 1,418 | 3,096 |
| 7 | Sukkur ... ... ... | 2,290 | 1,715 | 1,779 | 1,394 | ... | ... | 2 | 1 | ... | 1 | 4 | 2 | 4,075 | 3,113 | 7,188 |
| 8 | Upper Sind Frontier ... ... | 909 | 631 | 135 | 110 | ... | ... | ... | ... | ... | ... | ... | ... | 1,044 | 741 | 1,785 |
| | Total for the Province ... | 16,537 | 12,239 | 8,718 | 7,048 | 1 | ... | 92 | 62 | 20 | 18 | 26 | 18 | 25,394 | 19,385 | 44,779 |

| 1 | 2 | 4 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RATIO OF DEATHS PER 1,000 OF POPULATION. | | | | | | | | | | | | | | |
| No. | Districts. | Muhammadans. | | Hindus. | | Jains. | | Christians. | | Parsis. | | Other Classes. | | Total. | | |
| | | Male. | Female. | Male. | Female. | Male | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Male. | Female. | Total. |
| 1 | Karachi ... ... ... | 13·53 | 13·77 | 20·21 | 25·45 | ... | ... | 14·97 | 13·76 | 11·41 | 10·64 | 16·82 | 13·16 | 15·65 | 16·55 | 16·52 |
| 2 | Hyderabad ... ... ... | 9·95 | 8·74 | 14·65 | 15·54 | 23 | ... | 9·55 | 4·29 | ... | ... | ... | 1·15 | 11·29 | 10·80 | 11·08 |
| 3 | Nawabshah ... ... ... | 8·97 | 8·04 | 11·10 | 10·76 | ... | ... | 13·33 | 18·18 | ... | ... | 1·17 | 0·86 | 9·41 | 8·66 | 9·08 |
| 4 | Thar Parkar ... ... ... | 15·35 | 14·12 | 14·37 | 12·32 | ... | ... | ... | ... | ... | ... | 4·23 | 5·19 | 18·41 | 13·21 | 14·10 |
| 5 | Larkana ... ... ... | 10·51 | 10·22 | 13·22 | 14·13 | ... | ... | ... | ... | ... | ... | 2·55 | ... | 11·00 | 10·92 | 10·97 |
| 6 | Dadu ... ... ... | 8·40 | 8·76 | 12·21 | 14·43 | ... | ... | 5·00 | ... | ... | ... | ... | ... | 8·96 | 9·63 | 9·26 |
| 7 | Sukkur ... ... ... | 9·21 | 8·94 | 18·13 | 17·32 | ... | ... | 4·16 | 2·88 | ... | 18·86 | 1·23 | 1·02 | 11·66 | 11·34 | 11·52 |
| 8 | Upper Sind Frontier ... ... | 6·96 | 6·06 | 9·00 | 10·36 | ... | ... | ... | ... | ... | ... | ... | ... | 7·17 | 6·45 | 6·85 |
| | Total for the Province ... | 10·43 | 9·87 | 15·32 | 15·65 | 1·58 | ... | 13·29 | 12·11 | 10·71 | 10·79 | 2·81 | 2·93 | 11·68 | 11·37 | 11·55 |

# APPENDIX III—*contd.*

## ANNUAL FORM No. VI.

Deaths registered from different causes and Births in the Districts and Towns of the Province of Sind during the year 1939.

| 1 | 2 | 3 | 4 | | | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Births. | | | | | | | | | | Injuries. | |
| | | | | | | | | | | | | | Suicide. | |
| No. | Districts and Towns. | Population according to census of 1931. | Male. | Female. | Total. | Birth rate. | Cholera. | Small-pox. | Plague. | Fevers. | Dysentery and Diarrhœa. | Respiratory Diseases. | Male. | Femal. |
| | **A.—DISTRICTS.** | | | | | | | | | | | | | |
| 1 | Karachi ... ... ... ... | 3,13,766 | 2,283 | 1,611 | 3,894 | 12·41 | ... | 38 | ... | 1,395 | 14 | 903 | ... | ... |
| 2 | Hyderabad ... ... ... ... | 5,31,203 | 3,329 | 2,223 | 6,552 | 10·45 | 3 | 84 | ... | 2,735 | 27 | 975 | ... | ... |
| 3 | Nawabshah ... ... ... ... | 4,67,273 | 4,146 | 2,748 | 6,894 | 14·75 | .. | 48 | ... | 3,108 | 10 | 314 | 3 | ... |
| 4 | Thar Parkar ... ... ... | 4,54,021 | 5,319 | 4,126 | 9,445 | 20·80 | ... | 140 | ... | 3,818 | 72 | 1,432 | 1 | ... |
| 5 | Larkana ... ... ... ... | 4,08,298 | 5,009 | 3,973 | 8,982 | 22·00 | ... | 56 | ... | 3,401 | 9 | 101 | 1 | ... |
| 6 | Dadu ... ... ... ... | 3,09,146 | 3,109 | 2,385 | 5,494 | 17·78 | ... | 60 | ... | 2,136 | 19 | 173 | 3 | 1 |
| 7 | Sukkur ... ... ... ... | 4,62,901 | 5,313 | 4,038 | 9,351 | 20·20 | ... | 6 | ... | 3,451 | 22 | 182 | 5 | ... |
| 8 | Upper Sind Frontier ... ... ... | 2,44,578 | 1,903 | 1,479 | 3,382 | 13·83 | ... | 2 | ... | 1,422 | 4 | 37 | 1 | ... |
| | Total of the Districts (excluding towns) ... | 3,191,186 | 30,411 | 22,583 | 52,994 | 16·61 | 3 | 434 | ... | 21,465 | 177 | 4,117 | 14 | 1 |
| | **B.—TOWNS.** | | | | | | | | | | | | | |
| | **Karachi District.** | | | | | | | | | | | | | |
| 9 | Karachi ... ... T. C. ... | 2,47,791 | 7,422 | 7,156 | 14,578 | 58·83 | .. | 12 | ... | 179 | 628 | 2,664 | 3 | 1 |
| 10 | Karachi ... ... C. C. ... | 6,240 | 212 | 161 | 373 | 59·77 | ... | ... | ... | 30 | 9 | 14 | ... | ... |
| 11 | Drigh Road ... ... C. C. ... | 2,000 | 17 | 12 | 29 | 14·50 | ... | ... | ... | 7 | ... | 1 | ... | ... |
| 12 | Tatta ... ... ... T. C. ... | 9,635 | 68 | 42 | 110 | 11·42 | ... | ... | ... | 11 | 1 | 35 | ... | ... |
| | **Hyderabad District.** | | | | | | | | | | | | | |
| 13 | Hyderabad ... ... T. C. ... | 96,021 | 2,128 | 1,907 | 4,035 | 42·03 | ... | 34 | ... | 401 | 61 | 697 | 2 | 1 |
| 14 | Hyderabad ... ... C. C. ... | 4,530 | 24 | 29 | 53 | 11·70 | ... | ... | ... | 12 | ... | 8 | ... | ... |
| 15 | Hala ... ... ... T. C. ... | 7,304 | 110 | 89 | 199 | 27·24 | ... | ... | ... | 44 | ... | 15 | ... | ... |

ANNUAL FORM No. VI—*contd.*

| 1 | 2 | 3 | 4 | | | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Births. | | | | | | | | | | Injuries. Suicide. | |
| No. | Districts and Towns. | Population to census of 1931. | Male. | Female. | Total. | Birth rate. | Cholera. | Small-pox. | Plague. | Fevers | Dysentery and Diarrhoea. | Respiratory Diseases. | Male. | Female. |
| | B.—TOWNS.—*contd.* | | | | | | | | | | | | | |
| | HYDERABAD DISTRICT.—*contd.* | | | | | | | | | | | | | |
| 16 | Matiari ... ... T. C. ... | 6,692 | 61 | 28 | 92 | 13·74 | ... | 3 | ... | 38 | ... | 26 | ... | ... |
| 17 | Tando Muhammadkhan ... T. C. ... | 6,626 | 39 | 27 | 66 | 9·96 | ... | 6 | ... | 60 | ... | 17 | ... | ... |
| 18 | Nasarpur ... ... T. C. | 4,254 | 17 | 14 | 31 | 7·27 | ... | ... | ... | 12 | 3 | 15 | ... | ... |
| 19 | Tando Allahyar... ... T. C. | 5,146 | 21 | 12 | 33 | 6·41 | ... | 1 | ... | 26 | ... | 16 | ... | ... |
| | NAWABSHAH DISTRICT. | | | | | | | | | | | | | |
| 20 | Nawabshah ... ... T. C. ... | 7,023 | 79 | 62 | 141 | 20·08 | ... | 1 | ... | 107 | 1 | 20 | ... | ... |
| 21 | Tando Adam ... ... T. C. ... | 13,469 | 158 | 118 | 276 | 20·49 | ... | 41 | ... | 36 | 4 | 48 | ... | ... |
| 22 | Shahdadpur ... ... T. C. ... | 8,847 | 48 | 31 | 79 | 8·93 | ... | ... | ... | 24 | ... | 9 | ... | ... |
| | THAR PARKAR DISTRICT. | | | | | | | | | | | | | |
| 23 | Mirpurkhas ... ... T. C. ... | 10,178 | 77 | 59 | 136 | 13·36 | ... | 24 | ... | 35 | 4 | 55 | ... | ... |
| 24 | Umarkot ... ... T. C. ... | 3,841 | 47 | 39 | 86 | 22·39 | ... | 1 | ... | 21 | ... | 26 | ... | ... |
| | LARKANA DISTRICT. | | | | | | | | | | | | | |
| 25 | Larkana ... ... T. C. ... | 26,841 | 527 | 399 | 926 | 34·50 | ... | ... | ... | 166 | 10 | 94 | ... | ... |
| 26 | Kambar ... ... T. C. ... | 9,717 | 112 | 106 | 216 | 22·43 | ... | ... | ... | 93 | ... | 10 | ... | ... |
| 27 | Ratodero ... ... T. C. ... | 7,285 | 122 | 99 | 221 | 31·57 | ... | ... | ... | 100 | ... | ... | ... | ... |
| | DADU DISTRICT. | | | | | | | | | | | | | |
| 28 | Dadu ... ... T. C. ... | 6,562 | 66 | 59 | 125 | 19·06 | ... | 1 | ... | 33 | 2 | 13 | ... | ... |
| 29 | Kotri ... ... T. C. ... | 10,033 | 94 | 56 | 150 | 14·95 | ... | 5 | ... | 56 | 3 | 20 | ... | ... |
| 30 | Sehwan ... ... T. C. ... | 5,795 | 37 | 27 | 64 | 11·04 | ... | ... | ... | 9 | 1 | 13 | ... | ... |
| 31 | Manjhand ... ... T. C. ... | 2,746 | 47 | 37 | 84 | 30·59 | .. | 1 | ... | 42 | ... | 8 | ... | ... |

## ANNUAL FORM No. VI.—*contd*

| 1 | 2 | 12 | | | | 13 | 14 | 15 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Injuries.—*contd.* | | | | | | Ratio of Deaths per 1,000 of Population. | | | | | | | | | |
| | | | | | | | | | | | | | | | | From all Causes. | |
| No. | Districtand Towns. | Wounding or Accident. | Snake bite, or killed by wild beasts. | Rabies. | Total. | All other causes. | Total deaths from all causes. | Cholera. | Small-pox. | Plague. | Fevers. | Dysentery and Diarrhuea. | Respiratory Diseases. | Injuries | All other causes. | For the year. | Mean of previous five years. |
| | B.—TOWNS.—*contd.* | | | | | | | | | | | | | | | | |
| | Hyderabad District.—*concld.* | | | | | | | | | | | | | | | | |
| 16 | Matiari .. .. T. C. ... | 2 | ... | ... | 2 | 20 | 89 | .. | 0·45 | ... | 5·68 | ... | 3·88 | 0·30 | 2·98 | 13·29 | 15·61 |
| 17 | Tando Muhammadkhan ... T. C. ... | ... | ... | ... | .. | 26 | 109 | ... | 0·91 | ... | 9·06 | ... | 2·56 | .. | 3·92 | 16·45 | 14·48 |
| 18 | Nasarpur ... ... T. C. ... | ... | ... | ... | .. | 11 | 44 | ... | ... | ... | 2·82 | 0·70 | 4·23 | ... | 2·59 | 10·34 | 19·74 |
| 19 | Tando Allahyar .. .. T. C. ... | 1 | ... | ... | 1 | 23 | 67 | ... | 0·19 | ... | 5·05 | ... | 3·11 | 0·19 | 4·47 | 13·01 | 15·35 |
| | Nawabshah District. | | | | | | | | | | | | | | | | |
| 20 | Nawabshah ... ... T. C. ... | ... | ... | ... | ... | 56 | 185 | .. | 0·14 | ... | 15·24 | 0·14 | 2·85 | ... | 7·97 | 26·34 | 10·39 |
| 21 | Tando Adam ... ... T. C. ... | 2 | ... | ... | 2 | 79 | 210 | ... | 3·03 | ... | 2·68 | 0·30 | 3·56 | 0·15 | 5·87 | 15·59 | 15·51 |
| 22 | Shahdadpur ... ... T. C. ... | ... | ... | ... | ... | 10 | 43 | ... | ... | ... | 2·71 | ... | 1·02 | ... | 1·14 | 4·87 | 8·69 |
| | Thar Parkar District. | | | | | | | | | | | | | | | | |
| 23 | Mirpurkhas ... ... T. C. ... | 4 | 1 | ... | 5 | 39 | 162 | ... | 2·36 | ... | 3·44 | 0·39 | 5·39 | 0·49 | 3·83 | 15·90 | 15·72 |
| 24 | Umarkot ... ... T. C. ... | ... | ... | ... | ... | 8 | 56 | ... | 0·26 | ... | 5·47 | ... | 6·77 | ... | 2·08 | 14·58 | 20·83 |
| | Larkana District. | | | | | | | | | | | | | | | | |
| 25 | Larkana ... ... T. C. ... | 4 | ... | ... | 4 | 165 | 499 | ... | ... | ... | 6·19 | 0·57 | 3·50 | 0·15 | 6·15 | 16·36 | 20·56 |
| 26 | Kambar ... ... T. C. ... | 3 | ... | ... | 3 | 31 | 136 | ... | ... | ... | 9·47 | ... | 1·03 | 0·31 | 3.19 | 14·00 | 15·73 |
| 27 | Ratodero ... ... T. C. ... | 1 | ... | 1 | 2 | 7 | 109 | ... | ... | ... | 13·73 | ... | ... | 0·27 | 0·96 | 14.96 | 21·41 |
| | Dadu District. | | | | | | | | | | | | | | | | |
| 28 | Dadu ... ... T. C. ... | 1 | ... | ... | 1 | 14 | 64 | ... | 0·15 | ... | 6·03 | 0·30 | 1·99 | 0·15 | 2·14 | 9·76 | 7·46 |
| 29 | Kotri ... ... T. C. ... | ... | ... | ... | ... | 23 | 107 | ... | 0·50 | ... | 5·58 | 0·30 | 2·00 | ... | 2·29 | 10·67 | 10·17 |
| 30 | Sehwan ... ... T. C. .. | 1 | ... | ... | 1 | 14 | 38 | ... | ... | ... | 1·55 | 0·17 | 2·25 | 0·17 | 2·42 | 6·56 | 8·80 |
| 31 | Manjhand ... ... T. C. .. | ... | ... | ... | ... | 11 | 62 | ... | 0·37 | ... | 15·29 | ... | 2·91 | ... | 4·01 | 22 58 | 15·29 |

ANNUAL FORM

| 1 | 2 | 3 | 4 | | | |
|---|---|---|---|---|---|---|
| | | | Births. | | | |
| No. | Districts and Towns. | Population accordin to census of 1931. | Male. | Female. | Total. | Birth-rate. |
| | B.—TOWNS.—*contd.* | | | | | |
| | SUKKUR DISTRICT. | | | | | |
| 32 | Sukkur ... ... T. C. ... | 69,277 | 1,393 | 1,197 | 2,590 | 37·39 |
| 33 | Shikarpur ... ... T. C. ... | 62,505 | 1,173 | 1,006 | 2,179 | 34·86 |
| 34 | Rohri ... ... ... T. C. .. | 16,900 | 208 | 174 | 382 | 22·60 |
| 35 | Garhi Yasin ... ... T. C. ... | 7,370 | 147 | 141 | 288 | 39·07 |
| 36 | Ghotki ... .. T. C. .. | 4,826 | 122 | 122 | 244 | 50·56 |
| | UPPER SIND FRONTIER DISTRICT. | | | | | |
| 37 | Jacobabad ... T. C. ... | 15,748 | 101 | 63 | 164 | 10·41 |
| | Total of Towns ... | 6,85,202 | 14,680 | 13,272 | 27,952 | 40·79 |
| | Total of Province ... | 38,76,388 | 45,091 | 35,855 | 80,946 | 20·88 |



No. VI.—*contd.*

| 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
|---|---|---|---|---|---|---|---|
| | | | | | | INJURIES. | |
| | | | | | | Suicide. | |
| Cholera. | Small-pox. | Plague. | Fevers. | Dysentery and Diarrhoea. | Respiratory Diseases. | Male. | Female. |
| ... | ... | ... | 118 | 197 | 255 | ... | ... |
| ... | ... | ... | 532 | 17 | 166 | 2 | ... |
| ... | ... | ... | 72 | 11 | 37 | ... | ... |
| ... | ... | ... | 77 | 1 | 11 | ... | ... |
| ... | 1 | ... | 102 | 16 | 23 | ... | ... |
| ... | ... | ... | 66 | 4 | 8 | ... | ... |
| ... | 131 | ... | 2,508 | 973 | 4,327 | 7 | 2 |
| 3 | 565 | ... | 23,973 | 1,150 | 8,444 | 21 | 3 |

ANNUAL FORM

| 1 | 2 | 12 | | | | 13 | 14 |
|---|---|---|---|---|---|---|---|
| | | Inuries.—*concld.* | | | | | |
| No. | District and Towns. | Wounding or Accident. | Snake bite, or killed by wild beasts | Rabies | Total. | All other causes. | Total deaths from all causes. |
| | **B.—TOWNS.—*contd.*** | | | | | | |
| | **Sukkur District.** | | | | | | |
| 32 | Sukkur ... ... T. C. ... | 33 | 1 | ... | 34 | 243 | 847 |
| 33 | Shikarpur .. ... T. C. ... | 37 | 2 | ... | 41 | 613 | 1,369 |
| 34 | Rohri ... ... T. C. ... | 8 | ... | ... | 8 | 35 | 163 |
| 35 | Garhi Yasin ... ... T. C. ... | 11 | ... | ... | 11 | 44 | 144 |
| 36 | Ghotki ... . T. C. ... | ... | 1 | .. | 1 | 13 | 158 |
| | **Upper Sind Frontier District.** | | | | | | |
| 37 | Jacobabad ... ... T. C. ... | 3 | ... | ... | 3 | 15 | 96 |
| | Total of Towns ... | 263 | 14 | 3 | 289 | 5,553 | 13,781 |
| | Total of Province ... | 714 | 211 | 17 | 966 | 9,678 | 41,779 |



No. VI.—*concld.*

| | 15 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Ratio of Deaths per 1,000 of Population. | | | | | | | | | |
| | Cholera. | Small-pox. | Plague. | Fevers. | Dysentery and Diarrhoea. | Respiratory Diseases. | Injuries. | All other causes. | From all Causes. For the year. | From all Causes. Mean of previous five year |
| 32 | | ... | ... | 1·71 | 2·85 | 3·68 | 0·49 | 3.51 | 12·24 | 13·61 |
| 33 | ... | ... | ... | 8·50 | 0·27 | 2·67 | 0·66 | 9·80 | 21·90 | 24·30 |
| 34 | ... | ... | ... | 4·26 | 0·65 | 2·18 | 0·47 | 2·08 | 9·64 | 12·18 |
| 35 | ... | | ... | 10·45 | 0·14 | 1·49 | 1·49 | 5·97 | 19·54 | 24·83 |
| 36 | ... | 0·21 | ... | 21·13 | 3·31 | 4·77 | 0·21 | 2·69 | 32·32 | 35·85 |
| 37 | ... | ... | ... | 4·19 | 0·25 | 0·52 | 0·19 | 0·95 | 6·10 | 8·75 |
| Total of Towns | ... | ·19 | ... | 3 06 | 1·42 | 6·31 | ·42 | 8·11 | 20·11 | 20·72 |
| Total of Province | ·0008 | ·15 | ... | 6·18 | ·30 | 2·18 | ·25 | 2·49 | 11·55 | 13·34 |

## ANNUAL FORM No. VI (*a*).

Deaths registered from certain diseases in the districts and towns of the Province of Sind during the year 1939.

| 1 | 2 | 3 | 4 | | 5 | | 6 | |
|---|---|---|---|---|---|---|---|---|
| No. | Districts and Towns. | Population according to Census of 1931. | Enteric Fever. | | Measles. | | Cerebro-spinal Fever. | |
| | | | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. |
| | **A.—DISTRICTS.** | | | | | | | |
| 1 | Karachi ... ... ... ... | 3,13,766 | 3 | 0·10 | 20 | 0·06 | ... | ... |
| 2 | Hyderabad .. ... ... ... | 5,31,203 | 17 | 0·032 | 12 | 0·023 | ... | ... |
| 3 | Nawabshah ... ... ... | 4,67,273 | 24 | 0·05 | 21 | 0·04 | ... | ... |
| 4 | Thar Parkar ... ... ... | 4,54,021 | 27 | 0·06 | 11 | 0·03 | ... | ... |
| 5 | Larkana ... ... ... ... | 4,08,298 | 18 | 0·04 | 7 | 0·02 | ... | ... |
| 6 | Dadu ... ... ... ... | 3,09,146 | 25 | 0·08 | 23 | 0·07 | ... | ... |
| 7 | Sukkur ... ... ... ... | 4,62,901 | 30 | 0·07 | 3 | 0·006 | 1 | 0·002 |
| 8 | Upper Sind Frontier ... ... | 2,44,578 | 1 | 0·004 | 8 | 0·03 | ... | ... |
| | Total of the Districts (excluding towns) ... | 31,91,186 | 145 | 0·04 | 104 | 0·03 | 1 | 0·003 |
| | **B.—TOWNS.** | | | | | | | |
| | KARACHI DISTRICT. | | | | | | | |
| 9 | Karachi ... ... T. C. ... | 2,47,791 | 34 | 0·14 | 71 | 0·29 | 3 | 0·01 |
| 10 | Karachi ... ... C. C. ... | 6,240 | ... | ... | ... | ... | ... | ... |
| 11 | Drigh Road ... ... C. C. ... | 2,000 | ... | ... | ... | ... | ... | ... |
| 12 | Tatta ... ... ... T. C. ... | 9,635 | 1 | 0·10 | 1 | 0·10 | ... | ... |
| | HYDERABAD DISTRICT. | | | | | | | |
| 13 | Hyderabad ... ... T. C. ... | 96,021 | 9 | 0·09 | 69 | 0·72 | 3 | 0·03 |
| 14 | Hyderabad ... ... C. C. ... | 4,530 | ... | ... | ... | ... | ... | ... |
| 15 | Hala ... ... ... T. C. ... | 7,304 | ... | ... | ... | ... | ... | ... |

| No. | 7 Malaria. | | 8 Other Fevers. | | 9 Influenza. | | 10 Beri Beri. | | 11 Diphtheria. | | 12 Chicken-pox. | | 13 Mumps. | | 14 Whooping Cough. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. |
| 1 | 92 | 0·29 | 1,280 | 4·08 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2 | 23 | 0·043 | 2,683 | 5·5 | ... | ... | ... | ... | 1 | 0·002 | 2 | 0·004 | ... | ... | ... | ... |
| 3 | 59 | 0·13 | 3,004 | 6·43 | ... | ... | ... | ... | 1 | 0·002 | ... | ... | ... | ... | ... | ... |
| 4 | 33 | 0·07 | 3,746 | 8·25 | 1 | ·002 | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 0·01 |
| 5 | 39 | 0·10 | 3,337 | 8·17 | ... | ... | ... | ... | 2 | 0·004 | ... | ... | ... | ... | ... | ... |
| 6 | 44 | 0·14 | 2,044 | 6·61 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 7 | 71 | 0·15 | 3,346 | 7·22 | ... | ... | ... | ... | ... | ... | 1 | 0·002 | ... | ... | ... | ... |
| 8 | 16 | 0·07 | 1,397 | 5·71 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total | 377 | 0·12 | 20,837 | 6·53 | 1 | 0·0003 | ... | ... | 4 | 0·001 | 3 | 0·0009 | ... | ... | 6 | 0·002 |
| 9 | 23 | 0 10 | 48 | 0·19 | ... | ... | ... | ... | 12 | 0·05 | ... | ... | ... | ... | 25 | 0·10 |
| 10 | 2 | 0·32 | 28 | 4·49 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 11 | 1 | 0·50 | 6 | 3·00 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 12 | 4 | 0·42 | 5 | 0·52 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 13 | 270 | 2·81 | 50 | 0·52 | ... | ... | ... | ... | 3 | 0·03 | ... | ... | ... | ... | ... | ... |
| 14 | ... | ... | 12 | 2·64 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 15 | ... | ... | 44 | 6·02 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

ANNUAL FORM No VI (*a*).—*contd.*

| 1 | 2 | 15 | | 16 | | 17 | | 18 | | 19 | | 20 | | 21 | 22 | | | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Districts and Towns. | Cancer. | | Pneumonia. | | Phthisis. | | Other Respiratory Diseases. | | Dysentery. | | Diarrhœa. | | Deaths from child-birth. | Deaths under 1 year. | | | Infant mortality rate per 1,000 births. |
| | | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | | Male. | Female. | Total. | |
| | **A.—DISTRICTS.** | | | | | | | | | | | | | | | | | |
| 1 | Karachi ... ... ... ... | ... | ... | 723 | 2·31 | 83 | 0·27 | 97 | 0·29 | 5 | 0·02 | 9 | 0·03 | 48 | 272 | 206 | 478 | 122·75 |
| 2 | Hyderabad ... ... ... | ... | ... | 689 | 1·30 | 122 | 0·23 | 164 | 0·31 | 17 | 0·03 | 10 | 0·02 | 86 | 305 | 232 | 537 | 96·72 |
| 3 | Nawabshah ... ... ... | ... | ... | 197 | 0·42 | 44 | 0·09 | 73 | 0·16 | 1 | 0·002 | 9 | 0·02 | 94 | 331 | 221 | 552 | 80·07 |
| 4 | Thar Parkar ... ... ... | ... | ... | 1,142 | 2·52 | 112 | 0·25 | 172 | 0·38 | 16 | 0·04 | 56 | 0·12 | 101 | 432 | 345 | 777 | 82·27 |
| 5 | Larkana ... ... ... ... | ... | ... | 29 | 10·07 | 25 | 0·06 | 47 | 0·12 | ... | ... | 9 | 0·03 | 95 | 422 | 318 | 740 | 82·39 |
| 6 | Dadu ... ... ... ... | ... | ... | 81 | 0·26 | 53 | 0·17 | 39 | 0·13 | 7 | 0·02 | 12 | 0·04 | 66 | 216 | 212 | 428 | 77·90 |
| 7 | Sukkur ... ... ... ... | ... | ... | 72 | 0·16 | 37 | 0·08 | 73 | 0·16 | 9 | 0·02 | 13 | 0·03 | 93 | 515 | 384 | 899 | 96·13 |
| 8 | Upper Sind Frontier ... ... | ... | ... | 26 | 0·11 | 5 | 0·02 | 6 | 0·02 | 2 | 0·01 | 2 | 0·01 | 28 | 149 | 117 | 266 | 78·65 |
| | Total of the Districts (excluding towns) ... | ... | ... | 2,959 | 0·93 | 481 | 0·15 | 671 | 0·21 | 57 | ·02 | 120 | ·04 | 611 | 2,642 | 2,035 | 4,677 | 88·25 |
| | **B.—TOWNS.** | | | | | | | | | | | | | | | | | |
| | KARACHI DISTRICT. | | | | | | | | | | | | | | | | | |
| 9 | Karachi ... ... T. C. ... | ... | ... | 1,701 | 6·86 | 560 | 2·26 | 378 | 1·53 | 102 | 0·41 | 526 | 2·12 | 93 | 1,076 | 892 | 1,968 | 135·68 |
| 10 | Karachi ... ... C. C. ... | ... | ... | 11 | 1·76 | ... | ... | 3 | 0·48 | 5 | 0·80 | 4 | 0·64 | 1 | 23 | 10 | 33 | 88·47 |
| 11 | Drigh Road ... ... C. C. ... | ... | ... | 1 | 0·50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 2 | 68·97 |
| 12 | Tatta ... ... ... T. C. ... | ... | ... | 19 | 1.95 | 14 | 1·47 | 2 | 0·21 | ... | ... | 1 | 0·10 | 3 | 7 | 7 | 14 | 127·27 |
| | HYDERABAD DISTRICT. | | | | | | | | | | | | | | | | | |
| 13 | Hyderabad ... ... T. C. ... | ... | ... | 406 | 4·23 | 171 | 1·78 | 120 | 1·25 | 26 | 0·27 | 35 | 0·37 | 52 | 375 | 361 | 736 | 182·40 |
| 14 | Hyderabad ... ... C. C. ... | ... | ... | 8 | 1·77 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 2 | 37·74 |
| 15 | Hala .. ... ... T. C. ... | ... | ... | 6 | 0·82 | 9 | 1·23 | ... | ... | ... | ... | ... | ... | ... | 16 | 7 | 23 | 115·58 |

ANNUAL FORM No. VI (*a*).—*contd.*

| 1 | 2 | 3 | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | | 13 | | 14 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | District and Towns. | Population according to Census of 1931. | Enteric Fever. | | Measles. | | Cerebro-spinal Fever. | | Malaria. | | Other Fevers. | | Influenza. | | Beri Beri. | | Diphtheria. | | Chicken-pox. | | Mumps. | | Whooping Cough. | |
| | | | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. |
| | B.—TOWNS.—*contd.* | | | | | | | | | | | | | | | | | | | | | | | |
| | HYDERABAD DISTRICT.—*concld.* | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Matiari ... ... T. C. ... | 6,692 | ... | ... | 7 | 1·05 | ... | ... | ... | ... | 31 | 4·63 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 17 | Tando Muhammadkhan ... T. C. ... | 6,626 | 1 | 0·15 | ... | ... | ... | ... | ... | ... | 59 | 8·91 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 18 | Nasarpur ... ... T. C. ... | 4,254 | ... | ... | ... | ... | ... | ... | ... | ... | 12 | 2·82 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 19 | Tando Allahyar ... ... T. C. ... | 5,146 | ... | ... | ... | ... | ... | ... | 5 | 0·97 | 21 | 4·08 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | NAWABSHAH DISTRICT. | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Nawabshah ... ... T. C. ... | 7,023 | 5 | 0·71 | 1 | 0·14 | ... | ... | 1 | 0·14 | 100 | 14·25 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 21 | Tando Adam ... ... T. C. ... | 13,469 | 15 | 1·11 | 1 | 0·07 | ... | ... | ... | ... | 20 | 1·50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 22 | Shahdadpur ... ... T. C. ... | 8,847 | 1 | 0·11 | ... | ... | ... | ... | ... | ... | 23 | 2·61 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | THAR PARKAR DISTRICT. | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | Mirpurkhas ... ... T. C. ... | 10,178 | ... | ... | 2 | 0·20 | ... | ... | 5 | 0·49 | 28 | 2·75 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 24 | Umarkot ... ... T. C. ... | 3,841 | ... | ... | ... | ... | ... | ... | ... | ... | 21 | 5·47 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | LARKANA DISTRICT. | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | Larkana ... ... T. C. ... | 26,841 | 25 | 0·93 | 4 | 0·15 | ... | ... | 136 | 5·07 | 1 | 0·04 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 26 | Kambar ... ... T. C. ... | 9,717 | 1 | 0·10 | 1 | 0·10 | ... | ... | 5 | 0·51 | 85 | 8·76 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 27 | Ratodero ... ... T. C. ... | 7,285 | ... | ... | ... | ... | ... | ... | ... | ... | 100 | 13·73 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | DADU DISTRICT. | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | Dadu ... ... T. C ... | 6,562 | 6 | 0·92 | 5 | 0·76 | ... | ... | 1 | 0·15 | 21 | 3·20 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 29 | Kotri ... ... T. C. ... | 10,033 | ... | ... | ... | ... | ... | ... | 56 | 5·58 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0·10 | ... | ... | ... | ... |
| 30 | Sehwan ... ... T. C. ... | 5,795 | ... | ... | ... | ... | ... | ... | ... | ... | 9 | 1·55 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 31 | Manjhand ... ... T. C. ... | 2,746 | 1 | 0·37 | 7 | 2·54 | ... | ... | ... | ... | 34 | 12·38 | ... | ... | ... | ... | ... | ... | 1 | 0·37 | ... | ... | ... | ... |

ANNUAL FORM No. VI (*a*) —*contd.*

| 1 | 2 | 15 | | 16 | | 17 | | 18 | | 18 | | 19 | | 20 | 21 | | | 22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Districts and Towns. | Cancer. | | Pneumonia. | | Phthisis. | | Other Respiratory Diseases. | | Dysentery. | | Diarrhœa. | | Deaths from child-birth. | Deaths under 1 year. | | | Infant mortality rate, per 1000 births. |
| | | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | | Male. | Female. | Total. | |
| | TOWNS.—*contd.* | | | | | | | | | | | | | | | | | |
| | HYDERABAD DISTRICT.—*concld.* | | | | | | | | | | | | | | | | | |
| 16 | Matiari ... ... T. C. ... | ... | ... | 12 | 1·79 | 13 | 1·94 | 1 | 0·15 | ... | ... | ... | ... | 4 | 7 | 2 | 9 | 97·83 |
| 17 | Tando Muhammadkhan ... T. C. ... | ... | ... | 8 | 1·20 | 7 | 1·06 | 2 | 0·30 | ... | ... | ... | ... | 5 | 9 | 8 | 17 | 257·58 |
| 18 | Nasarpur ... ... T. C. ... | ... | ... | 9 | 2·12 | 3 | 0·70 | 6 | 1·41 | ... | ... | 3 | 0·70 | 2 | 2 | 3 | 5 | 161·29 |
| 19 | Tando Allahyar ... ... T. C. ... | ... | ... | 13 | 2·53 | 3 | 0·58 | ... | ... | ... | ... | ... | ... | 2 | 5 | 2 | 7 | 212·12 |
| | NAWABSHAH DISTRICT. | | | | | | | | | | | | | | | | | |
| 20 | Nawabshah ... ... T. C. ... | ... | ... | 14 | 2·00 | 5 | 0·71 | 1 | 0·14 | ... | ... | 1 | 0·14 | 5 | 33 | 32 | 65 | 460·99 |
| 21 | Tando Adam ... ... T. C. .. | . | ... | 26 | 1·91 | 12 | 0·90 | 10 | 0·75 | 2 | 0·15 | 2 | 0·16 | 14 | 18 | 25 | 43 | 155·80 |
| 22 | Shahdadpur ... ... T. C. ... | ... | ... | 1 | 0·11 | 7 | 0·80 | 1 | 0·11 | ... | ... | ... | ... | 5 | 2 | ... | 2 | 25·32 |
| | THAR PARKAR DISTRICT. | | | | | | | | | | | | | | | | | |
| 23 | Mirpurkhas ... ... T. C. ... | .. | ... | 43 | 4·22 | 10 | 0·98 | 2 | 0·19 | ... | ... | 4 | 0·39 | 4 | 9 | 8 | 17 | 125·00 |
| 24 | Umarkot ... ... T. C. ... | ... | ... | 18 | 4·69 | 8 | 2·08 | ... | ... | ... | ... | ... | ... | 4 | 5 | 1 | 6 | 69·77 |
| | LARKANA DISTRICT. | | | | | | | | | | | | | | | | | |
| 25 | Larkana ... ... T. C. ... | ... | ... | 41 | 1·53 | 17 | 0·63 | 36 | 1·34 | 4 | 0·15 | 6 | 0·22 | 30 | 53 | 45 | 98 | 105·83 |
| 26 | Kambar ... ... T. C. ... | ... | ... | 5 | 0·51 | 3 | 0·31 | 2 | 0·21 | ... | ... | ... | ... | 5 | 19 | 16 | 35 | 160·55 |
| 27 | Ratodero ... ... T. C. ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 18 | 7 | 25 | 113·12 |
| | DADU DISTRICT. | | | | | | | | | | | | | | | | | |
| 28 | Dadu ... ... ... T. C. ... | ... | ... | 2 | 0·31 | 3 | 0·46 | 8 | 1·22 | 1 | 0·15 | 1 | 0·15 | 3 | 8 | 2 | 10 | 80·00 |
| 29 | Kotri ... ... ... T. C. ... | ... | ... | 10 | 1·00 | 7 | 0·70 | 3 | 0·30 | 1 | 0·10 | 2 | 0·20 | 4 | 16 | 14 | 30 | 200·00 |
| 30 | Sehwan ... ... T. C. ... | ... | ... | 9 | 1·55 | 4 | 0·70 | ... | ... | 1 | 0·17 | ... | ... | 1 | 2 | 2 | 4 | 62·50 |
| 31 | Manjhand ... ... T. C. ... | ... | ... | 3 | 1·09 | 5 | 1·82 | ... | ... | ... | ... | ... | ... | 2 | 4 | 3 | 7 | 83·33 |

ANNUAL FORM No. VI (*a*)—*contd.*

| 1 | 2 | 3 | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | | 13 | | 14 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Districts and Towns. | Population according to Census of 1931. | Enteric Fever. | | Measles. | | Cerebro-spinal Fever. | | Malaria. | | Other Fevers. | | Influenza. | | Beri Beri. | | Diphtheria. | | Chicken-pox. | | Mumps. | | Whooping Cough. | |
| | | | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. |
| | B.—TOWNS.—*contd.* | | | | | | | | | | | | | | | | | | | | | | | |
| | SUKKUR DISTRICT. | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | Sukkur ... ... T. C. .. | 69,277 | 26 | 0·38 | ... | .. | ... | ... | 62 | 0·90 | 30 | 0·43 | ... | ... | ... | ... | ... | .. | .. | ... | ... | ... | 2 | 0·03 |
| 33 | Shikarpur ... ... T. C. ... | 62,505 | 29 | 0·47 | 11 | 0·17 | .. | ... | 491 | 7·85 | 1 | 0·01 | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | 9 | 0·15 |
| 34 | Rohri ... ... T. C. ... | 16,900 | 8 | 0·47 | 1 | 0·06 | ... | ... | 61 | 3·61 | 2 | 0·12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. |
| 35 | Garhi Yasin ... ... T. C. ... | 7,370 | 2 | 0·27 | ... | ... | ... | ... | 4 | 0·54 | 71 | 9·61 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 36 | Ghotki ... ... T. C. ... | 4,826 | 3 | 0·62 | 3 | 0·62 | ... | ... | 41 | 8·49 | 55 | 11·40 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | UPPER SIND FRONTIER DISTRICT. | | | | | | | | | | | | | | | | | | | | | | | |
| 37 | Jacobabad ... ... T. C. ... | 15,748 | ... | ... | ... | ... | ... | ... | 1 | 0·06 | 65 | 4·13 | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... |
| | Total of Towns ... | 6,85,202 | 167 | 0·24 | 184 | 0·27 | 6 | 0·008 | 1,169 | 1·71 | 982 | 1·43 | ... | ... | ... | ... | 15 | 0·02 | 2 | 0·003 | ... | ... | 36 | 0·05 |
| | Total of the Province ... | 38,76,388 | 312 | 0·08 | 288 | 0·07 | 7 | 0·002 | 1,546 | 0·40 | 21,819 | 5·63 | 1 | 0·0003 | ... | ... | 19 | 0·004 | 5 | 0·001 | ... | ... | 42 | 0·01 |

## ANNUAL FORM No. VI (*a*)—*concld.*

| 1 | 2 | 15 | | 16 | | 17 | | 18 | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Name of Town. | Cancer. | | Pneumonia. | | Phithsis. | | Other Respiratory Diseases. | |
| | | Deaths. | Ratio | Deaths. | Ratio. | Deaths. | Ratio. | Deaths. | Ratio. |
| | B,—TOWNS.—*concld.* | | | | | | | | |
| | SUKKUR DISTRICT. | | | | | | | | |
| 32 | Sukkur ... ... T. C. ... | ... | ... | 99 | 1·42 | 38 | 0·65 | 116 | 1·68 |
| 33 | Shikarpur ... ... T. C. ... | ... | ... | 48 | 0·77 | 59 | 0·95 | 50 | 0·80 |
| 3 | Rohri ... ... ... T. C. ... | ... | ... | 18 | 1·06 | 10 | 0·59 | 9 | 0·53 |
| 35 | Garhi Yasin ... ... T. C. ... | ... | .. | 6 | 0·81 | 3 | 0·41 | 2 | 0·27 |
| 36 | Ghotki ... ... T. C. ... | ... | ... | 6 | 1·25 | 7 | 1·45 | 10 | 2·07 |
| | UPPER SIND FRONTIER DISTRICT. | | | | | | | | |
| 37 | Jacobabad ... ... T. C. ... | ... | ... | 8 | 0·52 | .. | ... | ... | ... |
| | Total of Town ... | ... | ... | 2,551 | 3·72 | 978 | 1·43 | 762 | 1·11 |
| | Total of the Provinces ... | ... | ... | 5,510 | 1·42 | 1,459 | 0·38 | 1,433 | 0·37 |

| 2 | 19 | | 20 | | 21 | 22 | | | 23 |
|---|---|---|---|---|---|---|---|---|---|
| Name of Town. | Dysentery. | | Diarrhœa. | | Deaths from child-birth. | Deaths under 1 year. | | | Infant mortality rate per 1,000 births. |
| | Deaths. | Ratio. | Deaths. | Ratio. | | Male. | Female. | Total. | |
| Sukkur | 95 | 1·40 | 101 | 1·45 | 14 | 115 | 80 | 195 | 71·43 |
| Shikarpur | 6 | 0·10 | 11 | 0·17 | 58 | 202 | 190 | 392 | 179·90 |
| Rohri | 2 | 0·12 | 9 | 0·53 | 6 | 15 | 8 | 23 | 60·21 |
| Garhi Yasin | 1 | 0·14 | ... | ... | 10 | 26 | 16 | 42 | 297·87 |
| Ghotki | 4 | 0·83 | 12 | 2·18 | 10 | 34 | 31 | 65 | 266·80 |
| Jacobabad | ... | ... | 4 | 0·25 | ... | 5 | 3 | 8 | 48·78 |
| Total of Town | 251 | 0·37 | 722 | 1·05 | 359 | 2,106 | 1,777 | 3,883 | 138·59 |
| Total of the Provinces | 303 | 0·08 | 842 | 0·22 | 950 | 4,748 | 3,812 | 8,560 | 105·75 |

## APPENDIX III—*contd.*

### ANNUAL FORM No. VII.

Deaths registered from cholera in the districts of the Province of Sind, during each month of the year 1939.

| 1 | 2 | 3 | | 4 | | 5 | | | | | | | | | | | | 6 | | | 7 | | | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Districts. | Circles of Registration. | | Villages. | | | | | | | | | | | | | | Total. | | | Ratio of deaths per 1,000 of population. | | | Mean ratio per 1,000 of previous five years. | No. |
| | | Number in each district. | Number from which deaths from cholera were reported. | Number in each district. | Number from which deaths from cholera were reported. | January. | February. | March. | April. | May. | June. | July. | August | September. | October. | November. | December. | Male. | Female. | Total. | Male. | Female. | Total. | | |
| 1 | Karachi ... ... | 14 | .. | 1,041 | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| 2 | Hyderabad ... | 14 | ... | 870 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... | ... | ... | 3 | ... | 3 | 0·008 | ... | 0·005 | 0·006 | 2 |
| 3 | Nawabshah ... | 10 | 1 | 734 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | 0·01 | 3 |
| 4 | Thar Parkar ... | 13 | ... | 948 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | 0·02 | 4 |
| 5 | Larkana ... ... | 10 | ... | 2,118 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0·04 | 5 |
| 6 | Dadu ... ... | 11 | ... | 1,047 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| 7 | Sukkur ... ... | 13 | ... | 685 | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | .. | ... | 0·06 | 7 |
| 8 | Upper Sind Frontier... | 6 | ... | 1,652 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | 0·01 | 8 |
| | Total of the Province... | 91 | 1 | 9,095 | 1 | ... | ... | ... | ... | .. | ... | ... | ... | 3 | ... | ... | ... | 3 | ... | 3 | 0·001 | ... | 0·0008 | 0·02 | |

# APPENDIX III—*contd.*

## ANNUAL FORM No. VIII.

Deaths registered from small-pox in the districts of the Province of Sind during each month of the year 1939.

| 1 | 2 | 3 | | 4 | | 5 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Circles of Registration. | | Villages. | | | | | | | |
| No. | Districts. | Number in each district. | Number from which deaths from small-pox were reported. | Number in each district. | Number from which deaths from small-pox were reported. | January. | February. | March. | April. | May. | June. |
| 1 | Karachi ... ... | 14 | 7 | 1,041 | 15 | 2 | 6 | 6 | 8 | 4 | 3 |
| 2 | Hyderabad ... | 14 | 11 | 870 | 22 | 6 | 4 | 7 | 31 | 28 | 3 |
| 3 | Nawabshah ... | 10 | 8 | 734 | 9 | 7 | 4 | 2 | 21 | 10 | 24 |
| 4 | Thar Parkar ... | 13 | 12 | 918 | 31 | 12 | 41 | 28 | 23 | 20 | 10 |
| 5 | Larkana ... ... | 10 | 6 | 2,118 | 13 | 15 | 3 | 4 | 10 | 4 | 1 |
| 6 | Dadu ... ... | 11 | 8 | 1,047 | 21 | 35 | 8 | 13 | 3 | 5 | ... |
| 7 | Sukkur ... ... | 13 | 4 | 685 | 4 | .. | ... | 3 | 2 | 1 | 1 |
| 8 | Upper Sind Frontier... | 6 | 1 | 1,052 | 1 | ... | .. | ... | ... | 1 | 1 |
| | Total for the Province... | 91 | 57 | 9,095 | 119 | 77 | 66 | 63 | 98 | 73 | 43 |

| 5 | | | | | | 6 | | | 7 | | 8 | | | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Total. | | | Number of these deaths among children. | | Total ratio of deaths per 1,000 of population. | | | | |
| July. | August. | September. | October. | November. | December. | Male. | Female. | Total. | Under 1 year. | Under 10 years. | Male. | Female. | Total. | Mean ratio per 1,000 for previous five years. | No |
| 6 | 3 | 8 | 1 | ... | 3 | 33 | 17 | 50 | 4 | 23 | ·10 | ·07 | ·09 | 0·13 | 1 |
| 6 | 8 | 1 | 3 | 6 | 25 | 66 | 62 | 128 | 10 | 54 | ·17 | ·21 | ·19 | 0·13 | 2 |
| 4 | ... | ... | ... | 1 | 17 | 50 | 40 | 90 | 14 | 31 | ·18 | ·18 | ·18 | 0·12 | 3 |
| 6 | 3 | ... | ... | 5 | 17 | 90 | 75 | 165 | 9 | 68 | ·34 | ·36 | ·35 | 0·18 | 4 |
| 9 | 1 | 2 | 6 | ... | 1 | 26 | 30 | 56 | 8 | 32 | ·10 | ·14 | ·12 | 0·26 | 5 |
| ... | ... | 2 | ... | 1 | ... | 34 | 33 | 67 | 6 | 16 | ·18 | ·23 | ·20 | 0·13 | 6 |
| ... | ... | ... | ... | ... | .. | 4 | 3 | 7 | ... | 2 | ·01 | ·01 | ·01 | 0·10 | 7 |
| ... | ... | ... | ... | ... | ... | 1 | 1 | 2 | 1 | 1 | ·006 | ·008 | ·007 | 0·13 | 8 |
| 31 | 15 | 13 | 10 | 13 | 63 | 304 | 261 | 565 | 52 | 227 | ·14 | ·15 | ·15 | 0·15 | |

## APPENDIX III—*contd.*

### ANNUAL FORM No. IX.

Deaths registered from plague in the districts of the Province of Sind during each month of the year 1939.

| 1 | 2 | 3 | | 4 | | 5 | | | | | | | | | | | | 6 | | | 7 | | | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Districts. | Circles of Registration. | | Villages. | | | | | | | | | | | | | | Total. | | | Ratio of deaths per 1,000 of population. | | | Mean ratio per 1,000 of previous five years. | No. |
| | | Number in each district. | Number from which deaths from plague were reported. | Number in each district. | Number from which deaths from plague were reported. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Male. | Female. | Total. | Male. | Female. | Total. | | |
| 1 | Karachi ... ... | 14 | ... | 1,041 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0·007 | 1 |
| 2 | Hyderabad .. | 14 | ... | 870 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| 3 | Nawabshah ... | 10 | ... | 734 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| 4 | Thar Parkar ... | 13 | ... | 948 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| 5 | Larkana ... ... | 10 | ... | 2,118 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| 6 | Dadu ... .. | 11 | ... | 1,047 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| 7 | Sukkur ... ... | 13 | ... | 685 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 |
| 8 | Upper Sind Frontier ... | 6 | ... | 1,652 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| | Total for the Province. | 91 | ... | 9,095 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0·001 | |

# APPENDIX III.—*contd.*

## ANNUAL FORM No X.

Deaths registered from Fevers in the districts of the Province of Sind during each month of the year 1939.

| 1 | 2 | 3 | | 4 | | 5 | | | | | | | | | | | | 6 | | | 7 | | | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Circles of Registration. | | Villages. | | | | | | | | | | | | | | Total. | | | Ratio of deaths per 1,000 of population. | | | | |
| No. | Districts. | Number in each district. | Number from which deaths from fevers were reported. | Number in each district. | Number from which deaths from fevers were reported. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Male. | Female. | Total. | Male. | Female. | Total. | Mean ratio per 1,000 of previous five years. | No. |
| 1 | Karachi ... . | 14 | 14 | 1,041 | 461 | 202 | 135 | 170 | 135 | 129 | 128 | 119 | 99 | 106 | 120 | 140 | 139 | 885 | 737 | 1,622 | 2·69 | 2·94 | 2·90 | 3·42 | 1 |
| 2 | Hyderabad ... | 14 | 14 | 870 | 851 | 374 | 455 | 346 | 314 | 374 | 253 | 232 | 153 | 139 | 165 | 246 | 277 | 1,910 | 1,418 | 3,328 | 5·15 | 4·88 | 5·04 | 5·85 | 2 |
| 3 | Nawabshah ... | 10 | 10 | 734 | 734 | 462 | 437 | 303 | 272 | 301 | 190 | 170 | 217 | 154 | 217 | 256 | 296 | 1,931 | 1,344 | 3,275 | 6·92 | 6·18 | 6·59 | 8·13 | 3 |
| 4 | Thar Parkar ... | 13 | 13 | 948 | 929 | 427 | 394 | 427 | 462 | 331 | 273 | 201 | 178 | 248 | 289 | 334 | 310 | 2,263 | 1,611 | 3,874 | 8·64 | 7·81 | 8·27 | 8·28 | 4 |
| 5 | Larkana ... . | 10 | 10 | 2,118 | 860 | 443 | 397 | 363 | 244 | 251 | 244 | 242 | 217 | 223 | 324 | 467 | 404 | 2,107 | 1,652 | 3,759 | 8·42 | 8·18 | 8·31 | 9·82 | 5 |
| 6 | Dadu ... ... | 11 | 11 | 1,047 | 502 | 255 | 227 | 208 | 218 | 250 | 165 | 195 | 141 | 111 | 148 | 155 | 202 | 1,227 | 1,048 | 2,275 | 6·36 | 7·12 | 6·80 | 8·77 | 6 |
| 7 | Sukkur ... ... | 13 | 13 | 685 | 685 | 585 | 423 | 407 | 305 | 309 | 310 | 309 | 298 | 239 | 332 | 367 | 468 | 2,455 | 1,897 | 4,352 | 7·03 | 6·91 | 6·88 | 9·78 | 7 |
| 8 | Upper Sind Frontier ... | 6 | 6 | 1,652 | 392 | 198 | 124 | 143 | 106 | 119 | 108 | 100 | 81 | 87 | 118 | 170 | 134 | 885 | 603 | 1,488 | 5·87 | 5·25 | 5·72 | 7·19 | 8 |
| | Total for the Province. | 91 | 91 | 9,095 | 5,414 | 2,946 | 2,592 | 2,367 | 2,056 | 2,064 | 1,671 | 1,568 | 1,384 | 1,307 | 1,713 | 2,075 | 2,230 | 13,663 | 10,310 | 23,973 | 6·29 | 6·05 | 6·18 | 7·42 | |

## APPENDIX III—*contd.*

### ANNUAL FORM No. XI.

Deaths registered from Dysentery and Diarrhoea in districts of the Province of Sind during each month of the year 1939.

| 1 | 2 | 3 | | 4 | | 5 | | | | | | | | | | | | 6 | | | 7 | | | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Circles of Registration. | | Villages. | | | | | | | | | | | | | | Total. | | | Ratio of deaths per 1,000 of Population. | | | | |
| No. | Distrcts. | Number in each Dis- trict. | Number from which deaths from dysentery and Diarrhoea were reported. | Number in each Dis- trict. | Number from which deaths from Dysentery and diarrhoea were reported. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Male. | Female. | Total. | Male. | Female. | Total. | Mean ratio per 1,000 of previous five years. | No. |
| 1 | Karachi ... ... | 14 | 10 | 1,041 | 10 | 34 | 29 | 35 | 46 | 66 | 67 | 61 | 66 | 57 | 64 | 62 | 65 | 351 | 301 | 652 | 1·07 | 1·20 | 1·12 | 1·11 | 1 |
| 2 | Hyderabad ... ... | 14 | 9 | 870 | 17 | 3 | 5 | 7 | 5 | 3 | 6 | 7 | 16 | 9 | 9 | 11 | 10 | 53 | 38 | 91 | 0·14 | 0·13 | 0·14 | 0·24 | 2 |
| 3 | Nawabshah ... ... | 10 | 7 | 734 | 10 | ... | 1 | ... | 3 | 4 | ... | 3 | ... | 1 | ... | 1 | 2 | 10 | 5 | 15 | 0·04 | 0·02 | 0·03 | 0·06 | 3 |
| 4 | Thar Parkar ... ... | 13 | 12 | 948 | 26 | 2 | 2 | 9 | 3 | 7 | 3 | 2 | 12 | 8 | 2 | 8 | 18 | 49 | 27 | 76 | 0·18 | 0·13 | 0·16 | 0·09 | 4 |
| 5 | Larkana ... .. | 10 | 5 | 2,118 | 9 | 4 | 2 | 2 | 1 | 1 | 1 | ... | ... | 2 | 5 | ... | 1 | 12 | 7 | 19 | 0·04 | 0·03 | 0·04 | 0·05 | 5 |
| 6 | Dadu ... ... | 11 | 10 | 1,047 | 10 | 2 | ... | 1 | 4 | 1 | 1 | 2 | 3 | 2 | 3 | 4 | 2 | 14 | 11 | 25 | 0·07 | 0·07 | 0·07 | 0·07 | 6 |
| 7 | Sukkur ... .. | 13 | 13 | 685 | 14 | 27 | 21 | 17 | 17 | 17 | 20 | 21 | 25 | 22 | 27 | 24 | 26 | 144 | 120 | 264 | 0·41 | 0·43 | 0·42 | 0·32 | 7 |
| 8 | Upper Sind Frontier ... | 6 | 5 | 1,652 | 11 | ... | 1 | ... | ... | ... | ... | 1 | 4 | 1 | ... | 1 | ... | 6 | 2 | 8 | 0·04 | 0·02 | 0·03 | 0·03 | 8 |
| | Total for the Province ... | 91 | 71 | 9,095 | 107 | 72 | 61 | 71 | 79 | 99 | 98 | 97 | 126 | 102 | 110 | 111 | 124 | 639 | 511 | 1,150 | 0·30 | 0·30 | 0·30 | 0·29 | |

## APPENDIX III—*contd.*

### ANNUAL FORM No. XII.

Deaths registered from Respiratory diseases in the districts of the Province of Sind during each month of the year 1939.

| 1 | 2 | 3 | | 4 | | 5 | | | | | | | | | | | | 6 | | | 7 | | | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Districts. | Circles of Registration. | | Villages. | | | | | | | | | | | | | | Total. | | | Ratio of deaths per 1,000 of Population. | | | Mean ratio per 1,000 of previous five years. | No. |
| | | Number in each District. | Number from which deaths from Respiratory diseases were reported. | Number in each District. | Number from which deaths from Respiratory diseases were reported. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Male. | Female. | Total. | Male. | Female. | Total. | | |
| 1 | Karachi ... ... | 14 | 14 | 1,041 | 348 | 582 | 439 | 394 | 253 | 218 | 219 | 219 | 216 | 205 | 215 | 294 | 363 | 2,061 | 1,556 | 3,617 | 6·27 | 6·21 | 6·25 | 6·44 | 1 |
| 2 | Hyderabad ... ... | 14 | 14 | 870 | 316 | 257 | 268 | 242 | 148 | 90 | 62 | 76 | 59 | 77 | 80 | 169 | 244 | 1,104 | 668 | 1,772 | 2·97 | 2·29 | 2·68 | 0·45 | 2 |
| 3 | Nawabshah ... ... | 10 | 10 | 734 | 100 | 63 | 59 | 60 | 41 | 25 | 23 | 17 | 9 | 6 | 13 | 42 | 33 | 257 | 134 | 391 | 0·92 | 0·62 | 0·79 | 1·10 | 3 |
| 4 | Thar Parkar ... ... | 13 | 13 | 948 | 402 | 203 | 321 | 275 | 178 | 70 | 78 | 38 | 23 | 30 | 51 | 81 | 165 | 948 | 565 | 1,513 | 3·62 | 2·74 | 3·23 | 2·67 | 4 |
| 5 | Larkana ... ... | 10 | 9 | 2,119 | 19 | 26 | 20 | 22 | 13 | 12 | 15 | 11 | 11 | 14 | 21 | 12 | 28 | 133 | 72 | 205 | 0·53 | 0·35 | 0·45 | 0·47 | 5 |
| 6 | Dadu ... ... | 11 | 11 | 1,047 | 64 | 48 | 31 | 16 | 17 | 13 | 14 | 5 | 10 | 13 | 14 | 26 | 20 | 153 | 74 | 227 | 0·82 | 0·50 | 0·67 | 0·76 | 6 |
| 7 | Sukkur ... ... | 13 | 13 | 685 | 84 | 118 | 97 | 59 | 39 | 37 | 29 | 41 | 43 | 35 | 38 | 57 | 81 | 417 | 57 | 674 | 1·19 | 0·94 | 1·08 | 1·19 | 7 |
| 8 | Upper Sind Frontier ... | 6 | 6 | 1,652 | 11 | 14 | 9 | 1 | ... | 1 | 2 | 2 | 3 | 1 | 1 | 4 | 7 | 29 | 16 | 45 | 0·19 | 0·14 | 0·17 | 0·22 | 8 |
| | Total of the Province ... | 91 | 90 | 9,095 | 1,344 | 1,311 | 1,244 | 1,069 | 689 | 466 | 442 | 409 | 374 | 381 | 433 | 685 | 941 | 5,102 | 3,342 | 8,444 | 2·35 | 1·96 | 2·18 | 2·28 | |

# APPENDIX IV

## STATEMENT No. I.

### Showing the Particulars of Vaccination in Sind during the year 1939-40.

| No. | Districts or Towns. | | Population according to census of 1931. | Average number of Vaccinators employed throughout the year. | | Total number of persons vaccinated. | | | Average number of persons vaccinated by each Vaccinator. | Primary Vaccination. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Male. | Female. | Total. | | Total. | Successful. | | | Unknown. |
| | | | | | | | | | | | Under one year. | One and under six years. | Total of all ages. | |
| 1 | 2 | | 3 | 4 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | Karachi | T. C. | 2,54,031 | 6 | P. | 8,034 | 7,555 | 15,589 | 4,320 | 15,609 | 11,013 | 3,727 | 15,539 | 36 |
| | | | | | R. | 6,422 | 3,909 | 10,331 | | | | | | |
| 2 | Do. | C. C. | ... | 1 | P. | 21 | 21 | 42 | 198 | 42 | 33 | 4 | 38 | 3 |
| | | | | | R. | 149 | 7 | 156 | | | | | | |
| 3 | Do. | R. C. | 46 748 | 1 | P. | 671 | 576 | 1,247 | 1,482 | 1,247 | 322 | 714 | 1,191 | 56 |
| | | | | | R. | 185 | 50 | 235 | | | | | | |
| 4 | Tatta | ,, | 41,020 | 1 | P. | 1,000 | 776 | 1,776 | 2,088 | 1,776 | 438 | 1,029 | 1,561 | 215 |
| | | | | | R. | 246 | 66 | 312 | | | | | | |
| 5 | Do. | T. C. | 9,635 | 1 | P. | 125 | 135 | 260 | 336 | 260 | 79 | 159 | 241 | 19 |
| | | | | | R. | 53 | 23 | 76 | | | | | | |
| 6 | Ghorabari | R. C. | 37,976 | 1 | P. | 691 | 513 | 1,204 | 1,481 | 1,204 | 206 | 749 | 1,114 | 87 |
| | | | | | R. | 239 | 38 | 277 | | | | | | |
| 7 | Mirpur Sakro | ,, | 34,356 | 1 | P. | 421 | 375 | 796 | 1,004 | 796 | 336 | 337 | 698 | 90 |
| | | | | | R. | 152 | 56 | 208 | | | | | | |
| 8 | Sujawal | ,, | 37,946 | 1 | P. | 935 | 786 | 1,721 | 2,180 | 1,721 | 355 | 1,068 | 1,592 | 128 |
| | | | | | R. | 340 | 119 | 459 | | | | | | |
| 9 | Jati | ,, | 34,651 | 1 | P. | 542 | 376 | 918 | 1,111 | 918 | 309 | 504 | 890 | 28 |
| | | | | | R. | 168 | 25 | 193 | | | | | | |
| 10 | Shahbandar | ,, | 39,690 | 1 | P. | 629 | 480 | 1,109 | 1,186 | 1,109 | 299 | 623 | 1,055 | 44 |
| | | | | | R. | 63 | 14 | 77 | | | | | | |
| 11 | Mirpur Bathoro | ,, | 42,826 | 1 | P. | 902 | 652 | 1,554 | 1,787 | 1,554 | 352 | 885 | 1,496 | 58 |
| | | | | | R. | 176 | 57 | 233 | | | | | | |
| | Total, Karachi district | | 5,79,079 | 16 | P. | 13,971 | 12.245 | 26.216 | 2,423 | 26,236 | 13,742 | 9,799 | 25,425 | 764 |
| | | | | | R. | 8,193 | 4,364 | 12,557 | | | | | | |
| 12 | Hyderabad | T. C. | 96,021 | 1 | P. | 2,280 | 2,172 | 4,452 | 13,329 | 4,452 | 1,887 | 1,428 | 3,393 | 1,035 |
| | | | | | R. | 5,282 | 3,595 | 8,877 | | | | | | |
| 13 | Do. | C. C | 4,530 | 1 | P. | 62 | 58 | 120 | 194 | 120 | 56 | 45 | 102 | 18 |
| | | | | | R. | 36 | 38 | 74 | | | | | | |
| 14 | Do. | R. C. | 79,096 | 1 | P. | 1,361 | 1,116 | 2,477 | 3,617 | 2,477 | 790 | 1,331 | 2,270 | 207 |
| | | | | | R. | 891 | 249 | 1,140 | | | | | | |
| 15 | Hala | ,, | 1,13,496 | 2 | P. | 1,770 | 1,483 | 3,253 | 2,060 | 3,253 | 1,227 | 1,676 | 3,068 | 185 |
| | | | | | R. | 301 | 93 | 394 | | | | | | |
| 16 | Do. | T. C. | | | P. | 133 | 102 | 235 | | 235 | 149 | 81 | 231 | 4 |
| | | | | | R. | 17 | 1 | 18 | | | | | | |
| 17 | Matiari | ,, | | | P. | 102 | 89 | 191 | | 191 | 49 | 128 | 185 | 5 |
| | | | | | R. | 18 | 10 | 28 | | | | | | |
| 18 | Nasarpur | ,, | 61,320 | 1 | P. | 41 | 37 | 78 | 3,675 | 78 | 18 | 59 | 78 | ... |
| | | | | | R. | ... | ... | ... | | | | | | |
| 19 | Tando Allahyar | ,, | | | P. | 105 | 89 | 194 | | 194 | 43 | 118 | 183 | 11 |
| | | | | | R. | 157 | 66 | 223 | | | | | | |
| 20 | Do | ,, | | | P. | 1,336 | 1,129 | 2,465 | | 2,465 | 615 | 1,531 | 2,327 | 138 |
| | | | | | R. | 519 | 196 | 715 | | | | | | |
| 21 | Tando Muhammadkhan | R. C. | 1,04,545 | 2 | P. | 170 | 161 | 331 | 2,338 | 331 | 118 | 173 | 319 | 12 |
| | | | | | R. | 408 | 136 | 544 | | | | | | |
| 22 | Guni | T. C. | | | P. | 1,912 | 1,432 | 3,344 | | 3,344 | 818 | 1,998 | 3,049 | 294 |
| | | | | | R. | 362 | 94 | 456 | | | | | | |
| 23 | Tando Bago | R. C. | 67,998 | 1 | P. | 1,419 | 1,062 | 2,481 | 4,509 | 2,481 | 701 | 1,315 | 2,331 | 150 |
| | | | | | R. | 1,432 | 596 | 2,028 | | | | | | |
| 24 | Badin | ,, | 89,280 | 2 | P. | 2,218 | 1,624 | 3,842 | 2,437 | 3,842 | 1,010 | 2,020 | 3,446 | 396 |
| | | | | | R. | 770 | 201 | 971 | | | | | | |
| 25 | Matli | ,, | 46,638 | 1 | P. | 1,513 | 1,134 | 2,647 | 4,113 | 2,647 | 734 | 1,419 | 2,437 | 210 |
| | | | | | R. | 1,027 | 439 | 1.466 | | | | | | |
| | Total, Hyderabad district | | 6,62,924 | 12 | P. | 14,422 | 11,688 | 26,110 | 3,587 | 26,110 | 8,215 | 13,322 | 23,419 | 2,665 |
| | | | | | R. | 11,220 | 5,714 | 16,934 | | | | | | |
| 26 | Tando Adam | T. C. | 1,03,217 | 2 | P. | 676 | 622 | 1,298 | 1,348 | 1,298 | 546 | 521 | 1,174 | 124 |
| | | | | | R. | 586 | 321 | 907 | | | | | | |
| 27 | Shahdadpur | ,, | | | P. | 225 | 221 | 446 | | 446 | 190 | 179 | 401 | 45 |
| | | | | | R. | 31 | 13 | 44 | | | | | | |
| 28 | Do. | R. C. | | | P. | 1,621 | 1,318 | 2,939 | | 2,939 | 1,031 | 1,506 | 2,645 | 294 |
| | | | | | R. | 506 | 134 | 640 | | | | | | |

# STATEMENT No. I.—*contd.*

| No. | Districts or Towns. | | Re-vaccination. | | | Percentage of successful cases in which the results were known. | | Persons successfully vaccinated per 1,000 of population. | Total cost of Vaccination Department. | Number of all successful vaccinations performed by the vaccination staff only. | Average cost of each successful case performed by the vaccination staff. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total. | Successful. | Unknown. | Primary. | Re-vaccination. | | | | |
| 1 | 2 | | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | | | | | | | Rs. a. p. | | Rs. a. p. |
| 1 | Karachi | T C. | 10,331 | ... | 10,331 | 99·91 | ... | 61·17 | ... | ... | ... |
| 2 | Do. | C. C | 156 | 37 | 2 | 97·44 | 24·03 | ... | ... | ... | ... |
| 3 | Do. | R. C. | 235 | 46 | 62 | 100·00 | 26·59 | 26·46 | ... | ... | ... |
| 4 | Tatta | R. C. | 312 | 28 | 81 | 100 00 | 12·12 | 38·74 | ... | .. | ... |
| 5 | Do. | T. C. | 76 | 33 | 27 | 100·00 | 67·55 | 28·54 | ... | ... | ... |
| 6 | Ghorabari | R. C. | 277 | 20 | 35 | 100·00 | 5·26 | 29·86 | ... | ... | .. |
| 7 | Mirpur Sakro | " | 208 | 27 | 62 | 98·87 | 18·49 | 21·10 | ... | ... | ... |
| 8 | Sujawal | " | 459 | 69 | 168 | 99·94 | 23·71 | 43·77 | ... | ... | ... |
| 9 | Jati | " | 193 | 36 | 59 | 100·00 | 26·87 | 26·72 | ... | ... | ... |
| 10 | Shahbundar | " | 77 | 21 | 11 | 100·00 | 31·82 | 27·22 | ... | ... | ... |
| 11 | Mirpur Bathoro | " | 233 | 56 | 30 | 100·00 | 27·59 | 36·24 | ... | ... | ... |
| | Total, Karachi district | | 12,557 | 373 | 10,868 | 99·89 | 22·08 | 44·55 | 19,861 0 0 | 25,798 | 0 12 3 |
| 12 | Hyderabad | T. C. | 8,877 | 1,222 | 2,504 | 99·30 | 19·17 | 48·06 | ... | ... | ... |
| 13 | Do. | C. C. | 74 | 70 | ... | 100·00 | 94·59 | 37·97 | ... | ... | ... |
| 14 | Do. | R. C. | 1,140 | 98 | 265 | 100·00 | 11·20 | 29·94 | ... | ... | ... |
| 15 | Hala | " | 394 | 43 | 16 | 100·00 | 11·38 } | | | | |
| 16 | Do. | T. C. | 18 | 1 | 14 | 100·00 | 25·00 } | 31·09 | ... | ... | ... |
| 17 | Matiari | " | 28 | 1 | ... | 99·46 | 3·57 } | | | | |
| 18 | Nasarpur | " | ... | ... | ... | 100·00 | ... } | | | | |
| 19 | Tando Allahyar | " | 223 | 6 | 61 | 100·00 | 3·70 } | 42·73 | ... | ... | ... |
| 20 | Do. | " | 715 | 26 | 168 | 100·00 | 4·75 } | | | | |
| 21 | Tando Muhammadkhan | R. C. | 544 | 41 | 189 | 100·00 | 11·55 } | 33·49 | ... | ... | ... |
| 22 | Guni | T. C. | 456 | 92 | 200 | 99·97 | 35·94 } | | | | |
| 23 | Tando Bago | R. C. | 2,028 | 128 | 599 | 100·00 | 8·96 | 36·16 | ... | ... | ... |
| 24 | Badin | " | 971 | 141 | 312 | 100·00 | 21·40 | 40·18 | ... | ... | ... |
| 25 | Matli | " | 1,466 | 26 | 272 | 100·00 | 2·18 | 52·81 | ... | ... | ... |
| | Total, Hyderabad district | | 16,934 | 1,895 | 4,600 | 99·89 | 15·36 | 38·19 | 14,963 0 0 | 25,314 | 0 9 5 |
| 26 | Tando Adam | T. C. | 907 | 122 | 285 | 100·00 | 19·61 } | ... | ... | ... | ... |
| 27 | Shahdadpur | " | 44 | 3 | ... | 100·00 | 6·82 } | 43·20 | ... | ... | ... |
| 28 | Do. | R. C. | 640 | 114 | 86 | 100·00 | 50·36 } | ... | ... | ... | ... |

## STATEMENT No. I.—*contd.*

| No | Districts or Towns. | Population according to census of 1931. | Average number of Vaccinators employed throughout the year. | Total number of persons vaccinated. | | | Average number of persons vaccinated by each Vaccinator. | Primary Vaccination. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Male. | Female. | Total. | | Total. | Successful. | | | Unknown. |
| | | | | | | | | | Under one year. | One and under six years. | Total of all ages. | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 29 | Naushahro Feroze ... ... ... R. C. ... | 86,068 | 2 | P. 2,031<br>R. 260 | 1,782<br>105 | 3,813<br>365 | 2,089 | 3,813 | 1,964 | 1,487 | 3,559 | 252 |
| 30 | Kandiaro ... ... ... ... ,, ... | 80,814 | 1 | P. 1,273<br>R. 369 | 1,184<br>35 | 2,457<br>404 | 2,‘61 | 2,457 | 1,794 | 568 | 2,367 | 90 |
| 31 | Sakrand ... ... ... ... ,, ... | 62,476 | 1 | P. 949<br>R. 202 | 850<br>30 | 1,799<br>232 | 2,021 | 1,799 | 888 | 723 | 1,673 | 126 |
| 32 | Moro ... ... ... ... ,, ... | 59,563 | 1 | P. 949<br>R. 298 | 870<br>83 | 1,819<br>581 | 2,200 | 1,819 | 811 | 867 | 1,721 | 98 |
| 33 | Nawabshah ... ... ... ... ,, ... | 56,270 | 1 | P. 1,197<br>R. 429 | 1,022<br>250 | 2,219<br>679 | 2,898 | 2,219 | 10,28 | 916 | 2,042 | 177 |
| 34 | Sinjhoro ... ... ... ... ,, ... | 48,201 | 1 | P. 1,016<br>R. 356 | 948<br>205 | 1,964<br>561 | 2,525 | 1,964 | 821 | 871 | 1,803 | 161 |
| | Total, Nawabshah district ... | 4,96,612 | 9 | P. 9,937<br>R. 3,037 | 8,817<br>1,176 | 18,754<br>4,213 | 2,552 | 18,754 | 9,073 | 7,638 | 17,385 | 1,367 |
| 35 | Mirpurkhas ... ... ... ... R. C. ... | 47,536 | 1 | P. 958<br>P. 920 | 769<br>340 | 1,727<br>1,260 | 4,337 | 1,727 | 539 | 923 | 1,651 | 76 |
| 36 | Do. ... ... ... ... T. C. ... | | | R. 332<br>P. 548 | 303<br>167 | 635<br>715 | | 635 | 242 | 324 | 617 | 18 |
| 37 | Umerkot ... ... ... ... ,, ... | 3,841 | 1 | R. 139<br>P. 175 | 99<br>85 | 238<br>260 | 4,352 | 238 | 82 | 116 | 218 | 20 |
| 38 | Do. ... ... ... ... R. C. ... | 39,628 | | R. 874<br>R. 1,538 | 743<br>699 | 1,617<br>2,237 | | 1,617 | 619 | 710 | 1,414 | 202 |
| 39 | Samaro ... ... ... ... ,, ... | 43,779 | 1 | P. 1,167<br>R. 945 | 926<br>456 | 2,093<br>1,401 | 3,494 | 2,093 | 737 | 1,097 | 1,991 | 102 |
| 40 | Jamesabad ... ... ... ... ,, ... | 30,745 | 1 | P. 833<br>R. 993 | 670<br>568 | 1,503<br>1,561 | 3,064 | 1,503 | 538 | 705 | 1,377 | 126 |
| 41 | Chachro ... ... ... ... ,, ... | 61,974 | 1 | P. 1,002<br>R. 811 | 829<br>293 | 1,831<br>1,104 | 2,935 | 1,831 | 902 | 732 | 1,675 | 127 |
| 42 | Nagar Parkar ... ... ... ... ,, ... | 41,726 | 1 | P. 749<br>K. 360 | 631<br>141 | 1 380<br>501 | 1,881 | 1,380 | 539 | 671 | 1,285 | 88 |
| 43 | Diplo ... ... ... ... ... ,, ... | 25,242 | 1 | P. 608<br>R. 295 | 503<br>61 | 1,111<br>356 | 1,467 | 1,111 | 301 | 619 | 1,013 | 98 |
| 44 | Mithi ... ... ... ... ... ,, ... | 45,709 | 1 | P. 769<br>R. 299 | 686<br>100 | 1,455<br>399 | 1,854 | 1,455 | 594 | 626 | 1,272 | 182 |
| 45 | Khipro ... ... ... ... ... ,, ... | 51,030 | 2 | P. 1,542<br>R. 945 | 1,030<br>306 | 2,572<br>1,251 | 1,912 | 2,572 | 1,023 | 1,252 | 2,368 | 204 |
| 46 | Sanghar ... ... ... ... ,, ... | 33,777 | 1 | P. 771<br>R. 615 | 633<br>252 | 1,404<br>867 | 2,271 | 1,404 | 602 | 550 | 1,287 | 117 |
| 47 | Digri ... ... ... ... ... ,, ... | 43,053 | 1 | P. 1,257<br>R. 2,281 | 1,034<br>1,138 | 2,291<br>3,4[illegible]9 | 5,710 | 2,291 | 863 | 1,055 | 2,189 | 102 |
| | Total, Thar Parkar district ... | 4,68,040 | 12 | P. 11,001<br>R. 10,725 | 8,856<br>4,606 | 19,857<br>15,331 | 2,932 | 19,857 | 7,581 | 9,380 | 1,8357 | 1,462 |
| 48 | Dadu ... ... ... ... T. C. ... | 57,549 | 1 | P. 103<br>R. 86 | 93<br>3 | 196<br>89 | 2,647 | 196 | 76 | 106 | 185 | 11 |
| 49 | Do. ... ... ... ... R. C. ... | | | P. 1,011<br>R. 243 | 1,058<br>50 | 2,069<br>293 | | 2,069 | 1,172 | 787 | 2012 | 57 |
| 50 | Sehwan ... ... ... ... ,, ... | 45,086 | 1 | P. 651<br>R. 207 | 642<br>47 | 1,293<br>254 | 1,700 | 1,293 | 782 | 331 | 1,136 | 157 |
| 51 | Do. ... ... ... ... ,, ... | | | P. 75<br>R. 6 | 68<br>4 | 143<br>10 | | 143 | 54 | 69 | 133 | 10 |
| 52 | Kotri ... ... ... ... T. C. ... | 53,787 | 1 | P. 116<br>R. 584 | 107<br>157 | 223<br>741 | 2,511 | 223 | 78 | 109 | 211 | 12 |
| 53 | Do. ... ... ... ... ,, ... | | | P. 456<br>R. 480 | 388<br>131 | 844<br>611 | | 844 | 337 | 396 | 774 | 70 |
| 54 | Manjhand ... ... ... ... R. C. ... | ... | ... | P. 17<br>R. 44 | 16<br>15 | 33<br>59 | ... | 33 | 13 | 13 | 28 | 5 |
| 55 | Johi ... ... ... ... T. C. ... | 51,448 | 1 | P. 1,016<br>R. 294 | 808<br>86 | 1,824<br>380 | 2,204 | 1,824 | 802 | 758 | 1,653 | 167 |
| 56 | Kakar ... ... ... ... R. C. ... | 48,448 | 1 | P. 842<br>R. 119 | 825<br>43 | 1,667<br>162 | 1,829 | 1,667 | 807 | 735 | 1,591 | 76 |
| 57 | Mehar ... ... ... ... ,, ... | 63,001 | 1 | P. 1,306<br>R. 266 | 1,296<br>66 | 2,602<br>332 | 2,934 | 2,602 | 1.378 | 954 | 2,399 | 202 |
| 58 | Kohistan ... ... ... ... ,, ... | 17,374 | 1 | P. 380<br>R. 539 | 295<br>338 | 675<br>877 | 1,552 | 675 | 187 | 356 | 638 | 30 |
| | Total, Dadu district ... | 3,36,693 | 7 | P. 5,973<br>R. 2,868 | 5,596<br>940 | 11,569<br>3,808 | 2,197 | 11,569 | 5,686 | 4,614 | 10,760 | 797 |

STATEMENT No. I.—*contd.*

| No. | Districts or Towns. | Re-vaccination. Total. | Successful. | Unknown. | Percentage of successful cases in which the results were known: Primary. | Re-vaccination. | Persons successfully vaccinated per 1,000 of population. | Total cost of Vaccination Department. | Number of all successful vaccinations performed by the vaccination staff only. | Average cost of each successful case performed by the vaccination staff. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | | | | | | Rs. a. p. | | Rs. a. p. |
| 29 | Naushahro Feroze ... ... ... R. C. ... | 365 | 61 | 95 | 99·94 | 22·59 | 42·06 | ... | ... | ... |
| 30 | Kandiaro ... ... ... " .. | 404 | 37 | 43 | 100·00 | 10·25 | 29·75 | ... | ... | ... |
| 31 | Sakrand ... ... ... " ... | 232 | 6 | 80 | 100·00 | 3·95 | 26·88 | ... | ... | ... |
| 32 | Moro ... ... ... " ... | 381 | 71 | 170 | 100·00 | 33·65 | 30·09 | .. | ... | ... |
| 33 | Nawabshah ... ... ... " ... | 679 | 58 | 152 | 100·00 | 11·01 | 37·32 | ... | ... | ... |
| 34 | Sinjhoro ... ... ... " ... | 561 | 109 | 89 | 100·00 | 23·09 | 39·66 | ... | ... | ... |
| | Total, Nawabshah district ... | 4,213 | 581 | 1,000 | 99·99 | 18·08 | 36·20 | 11,095 0 0 | 17,966 | 0 9 10 |
| 35 | Mirpurkhas ... ... ... R. C. .. | 1,260 | 11 | 997 | 100·00 | 4·18 | 48·32 } | ... | ... | ... |
| 36 | Do. ... ... T. C. ... | 715 | 8 | 535 | 100·00 | 4·44 | | | | |
| 37 | Umerkot ... ... ... " ... | 260 | 45 | 45 | 100·00 | 20·93 | 68·47 | ... | ... | ... |
| 38 | Do. ... ... ... R. C. ... | 2,237 | 184 | 688 | 99·93 | 11·88 | 40·33 | ... | ... | ... |
| 39 | Samaro ... ... ... " ... | 1,401 | 189 | 459 | 100·00 | 20·06 | 49·80 | ... | ... | ... |
| 40 | Jamesabad ... ... ... " ... | 1,561 | 298 | 1,139 | 100·00 | 70·62 | 54·48 | ... | ... | ... |
| 41 | Chachro ... ... ... " ... | 1,104 | 39 | 483 | 98·50 | 6·28 | 27·66 | ... | ... | ... |
| 42 | Nagar Parkar ... ... ... " ... | 501 | 20 | 38 | 99·47 | 4·32 | 31·28 | ... | ... | ... |
| 43 | Diplo ... ... ... " ... | 356 | 23 | 116 | 100·00 | 9·58 | 41·04 | ... | ... | ... |
| 44 | Mithi ... ... ... " ... | 399 | 20 | 190 | 99·92 | 9·57 | 28·27 | ... | .. | ... |
| 45 | Khipro ... ... ... " .. | 1,251 | 43 | 833 | 100·00 | 10·29 | 47·25 | ... | . | ... |
| 46 | Sanghar ... ... ... " ... | 867 | 175 | 149 | 100·00 | 24·37 | 43·31 | ... | | ... |
| 47 | Digri ... ... ... " ... | 3,419 | 814 | 901 | 100·00 | 32·33 | 65·75 | ... | ... | ... |
| | Total, Thar Parkar district ... | 15,331 | 1,869 | 6,573 | 99·79 | 21·34 | 43·21 | 14,873 0 0 | 20,226 | 0 11 9 |
| 48 | Dadu ... ... ... T. C. ... | 89 | 9 | 37 | 100·00 | 17·31 | 38·56 } | ... | ... | ... |
| 49 | Do. ... ... ... R. C. ... | 293 | 13 | 24 | 100·00 | 4·83 | | | | |
| 50 | Sehwan ... ... ... " ... | 254 | 35 | 112 | 100·00 | 24·64 | 28·97 } | ... | ... | ... |
| 51 | Do. ... ... ... T. C. ... | 10 | 2 | 6 | 100·00 | 50·00 | | | | |
| 52 | Kotri ... ... ... " ... | 741 | 8 | ... | 100·00 | 1·08 | 18·50 } | ... | ... | ... |
| 53 | Do. ... ... ... R. C. .. | 611 | 2 | 18 | 100·00 | ·34 | | | | |
| 54 | Manjhand ... ... ... T. C. ... | 59 | 2 | 8 | 100·00 | 3·92 | ... | ... | ... | ... |
| 55 | Johi ... ... ... R. C. ... | 380 | 15 | 124 | 100·00 | 5·86 | 32·42 | ... | ... | ... |
| 56 | Kakar ... ... ... " ... | 162 | 15 | 38 | 99·76 | 12·10 | 33·15 | ... | ... | ... |
| 57 | Mehar ... ... ... " ... | 332 | 11 | 140 | 100·00 | 11·96 | 38·25 | ... | ... | ... |
| 58 | Kohistan ... ... ... " ... | 877 | 122 | 149 | 99·96 | 16·76 | 43·75 | ... | | |
| | Total, Dadu district ... | 3,808 | 234 | 656 | 98·91 | 7·42 | 32·65 | 8,825 0 0 | 10,994 | 0 12 10 |
| | | | | | 99·89 | | | | | |

STATEMENT No. I.—*contd*

| No. | Districts or Towns. | | Population according to census of 1931. | Average number of Vaccinators employed throughout the year. | | Total number of persons vaccinated. | | | Average number of persons vaccinated by each Vaccinator. | Primary Vaccination. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Male. | Female. | Total. | | Total. | Successful. | | | Unknown. |
| | | | | | | | | | | | Under one year. | One and under six years. | Total of all ages. | |
| 1 | 2 | | 3 | 4 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 59 | Larkana ... ... ... ... | T C. ... | 26,841 | 1 | P.<br>R. | 360<br>19 | 258<br>6 | 618<br>25 | 643 | 618 | 152 | 426 | 579 | 39 |
| 60 | Do. ... ... ... ... | R. C. ... | 71,272 | 1 | P.<br>R. | 953<br>2,482 | 911<br>1,470 | 1,864<br>3,952 | 5,816 | 1,865 | 1,017 | 538 | 1,570 | 292 |
| 61 | Ratodero ... ... ... ... | „ ... | 59,781 (61–62) | 1 (61–62) | P.<br>R. | 637<br>1,465 | 536<br>659 | 1,173<br>2,124 | 3,649 (61–62) | 1,173 | 843 | 232 | 1,099 | 74 |
| 62 | Do. ... ... ... ... | T. C. ... | | | P.<br>R. | 153<br>65 | 126<br>8 | 279<br>73 | | 279 | 229 | 34 | 264 | 15 |
| 63 | Kambar ... ... ... ... | „ ... | 9,717 | 1 | P.<br>R. | 185<br>5 | 157<br>9 | 342<br>14 | 356 | 343 | 190 | 97 | 287 | 56 |
| 64 | Do. ... .. ... ... | R. C. ... | 72,028 | 1 | P.<br>R. | 1,214<br>3,376 | 1,096<br>1,116 | 2,310<br>4,492 | 6,802 | 2,310 | 1,325 | 650 | 2,013 | 291 |
| 65 | Miro Khan ... ... ... ... | „ ... | 47,214 | 1 | P.<br>R. | 776<br>1,004 | 737<br>785 | 1,513<br>1,789 | 3,302 | 1,513 | 820 | 520 | 1,370 | 142 |
| 66 | Warah ... ... ... ... | „ ... | 64,783 | 1 | P.<br>R. | 1,096<br>1,027 | 1,012<br>408 | 2,108<br>1,435 | 3,543 | 2,108 | 1,143 | 723 | 1,924 | 182 |
| 67 | Dokri ... ... ... ... | „ ... | 76,567 | 1 | P.<br>R. | 713<br>1,882 | 599<br>874 | 1,312<br>2,756 | 4,068 | 1,312 | 825 | 272 | 1,124 | 188 |
| 68 | Shahdadkot ... ... ... ... | „ ... | 37,195 | 1 | P.<br>R. | 852<br>799 | 796<br>940 | 1,648<br>1,739 | 3,387 | 1,648 | 834 | 630 | 1,539 | 107 |
| | Total, Larkana district ... | | 4,65,399 | 9 | P.<br>R. | 6,939<br>12,124 | 6,228<br>6,275 | 13,167<br>18,399 | 3,507 | 13,169 | 7,378 | 4,122 | 11,769 | 1,386 |
| 69 | Shikarpur ... ... ... ... | T. C. .. | 62,505 | 1 | P.<br>R. | 970<br>39 | 943<br>5 | 1,913<br>44 | 1,957 | 1,913 | 1,483 | 395 | 1,880 | 31 |
| 70 | Do. ... ... ... ... | R. C. ... | 73,419 | 1 | P.<br>R. | 1,308<br>63 | 1,223<br>29 | 2,531<br>92 | 2,623 | 2,531 | 1,689 | 563 | 2,267 | 264 |
| 71 | Sukkur ... ... ... ... | „ ... | 66,350 | 1 | P.<br>R. | 817<br>85 | 784<br>5 | 1,605<br>90 | 1,695 | 1,605 | 1,181 | 243 | 1,436 | 169 |
| 72 | Do. ... ... ... ... | T. C. ... | 69,277 | 1 | P.<br>R. | 973<br>62 | 878<br>25 | 1,851<br>87 | 1,938 | 1,851 | 895 | 893 | 1,788 | 63 |
| 73 | Rohri ... ... ... ... | „ ... | 16,900 | 1 | P.<br>R. | 245<br>5 | 216<br>1 | 461<br>6 | 467 | 461 | 285 | 152 | 439 | 21 |
| 74 | Do. ... ... ... ... | R. C. ... | 77,826 | 1 | P.<br>R. | 1,260<br>171 | 1,237<br>5 | 2,497<br>176 | 2,673 | 2,497 | 1,470 | 793 | 2,272 | 225 |
| 75 | Garhi Yasin ... ... ... ... | „ ... | 68,674 (75–76) | 1 (75–76) | P.<br>R. | 879<br>169 | 863<br>31 | 1,742<br>200 | 2,134 (75–76) | 1,742 | 1,313 | 273 | 1,593 | 149 |
| 76 | Do. ... ... ... ... | T. C. ... | | | P.<br>R. | 100<br>4 | 87<br>1 | 187<br>5 | | 187 | 155 | 17 | 172 | 15 |
| 77 | Ghotki ... ... ... ... | „ ... | 46,839 (77–78) | 1 (77–78) | P.<br>R. | 19<br>10 | 14<br>3 | 33<br>13 | 1,379 (77–78) | 33 | 17 | 11 | 28 | 5 |
| 78 | Do. ... ... ... ... | R. C. ... | | | P.<br>R. | 659<br>32 | 625<br>17 | 1,284<br>49 | | 1,284 | 856 | 165 | 1,027 | 257 |
| 79 | Mirpur Mathelo ... ... ... ... | „ ... | 48,556 | 1 | P.<br>R. | 677<br>14 | 674<br>6 | 1,351<br>20 | 1,371 | 1,351 | 753 | 506 | 1,267 | 84 |
| 80 | Pano Akil ... ... ... ... | „ ... | 47,287 | 1 | P.<br>R. | 788<br>59 | 719<br>32 | 1,507<br>91 | 1,598 | 1,507 | 938 | 333 | 1,275 | 232 |
| 81 | Ubauro ... ... ... ... | „ ... | 46,146 | 1 | P.<br>R. | 527<br>199 | 515<br>31 | 1,042<br>230 | 1,272 | 1,042 | 660 | 243 | 924 | 118 |
| | Total, Sukkur district ... | | 6,23,779 | 11 | P.<br>R. | 9,222<br>912 | 8,782<br>191 | 18,004<br>1,103 | 1,737 | 18,004 | 11,695 | 4,587 | 16,368 | 1,633 |
| 82 | Jacobabad ... ... ... ... | R. C. ... | 71,561 | 1 | P.<br>R. | 590<br>196 | 503<br>43 | 1,093<br>239 | 1,332 | 1,093 | 727 | 280 | 1,038 | 54 |
| 83 | Do. ... ... ... ... | T. C. ... | 15,748 | 1 | P.<br>R. | 234<br>7 | 202<br>6 | 436<br>13 | 449 | 436 | 296 | 135 | 434 | 2 |
| 84 | Garhi Khairo ... ... ... ... | R. C. ... | ... | 1 | P.<br>R. | 669<br>198 | 473<br>17 | 1,142<br>215 | 1,357 | 1,142 | 549 | 508 | 1,085 | 57 |
| 85 | Thul ... ... ... ... | „ ... | 61,303 | 1 | P.<br>R. | 1,175<br>96 | 1,003<br>17 | 2,178<br>113 | 2,291 | 2,178 | 1,282 | 776 | 2,086 | 89 |
| 86 | Kandhkot ... ... ... ... | „ ... | 64,525 | 1 | P.<br>R. | 1,411<br>310 | 1,127<br>114 | 2,538<br>424 | 2,962 | 2,538 | 1,013 | 1,157 | 2,339 | 199 |
| 87 | Kashmore ... ... ... ... | „ ... | 41,407 | 1 | P.<br>R. | 693<br>200 | 651<br>56 | 1,344<br>256 | 1,600 | 1,344 | 735 | 457 | 1,220 | 124 |
| | Total, Upper Sind Frontier district ... | | 2,54,544 | 6 | P.<br>R. | 4,772<br>1,007 | 3,959<br>253 | 8,731<br>1,260 | 1,665 | 8,731 | 4,602 | 3,313 | 8,202 | 525 |
| | Total, Sind ... | | 38,87,070 | 82 | P.<br>R. | 76,237<br>50,086 | 66,171<br>25,519 | 1,42,408<br>73,605 | 2,634 | 1,42,430 | 67,972 | 56,775 | 1,31,685 | 10,599 |

STATEMENT No. I—*contd.*

| No. | Districts or Towns. | Re-vaccination. Total. | Re-vaccination. Successful. | Re-vaccination. Unknown. | Percentage of successful cases in which the results were known. Primary. | Percentage of successful cases in which the results were known. Re-vaccination. | Persons successfully vaccinated per 1,000 of population. | Total cost of Vaccination Department. | Number of all successful vaccinations performed by the vaccination staff only. | Average cost of each successful case performed by the vaccination staff. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | | | | | | Rs. a. p. | | Rs. a. p. |
| 59 | Larkana ... ... ... T. C ... | 25 | ... | 24 | 100·00 | ... | 21·57 | ... | ... | ... |
| 60 | Do. ... ... ... R. C. ... | 3,952 | 800 | 1,623 | 99·87 | 34·35 | 33·25 | ... | ... | ... |
| 61 | Ratodero ... ... ... ,, ... | 2,124 | 80 | 1,144 | 100·00 | 8·16 | 24·21 | ... | ... | ... |
| 62 | Do. ... ... ... T. C. ... | 73 | 3 | 38 | 100·00 | 8·57 | | | | |
| 63 | Kambar ... ... ... ,, ... | 14 | 4 | 1 | 100·03 | 30·77 | 29·95 | ... | ... | ... |
| 64 | Do. ... ... ... R. C. ... | 4,492 | 363 | 1,844 | 99·70 | 13·71 | 32·99 | | | |
| 65 | Miro Khan ... ... ... ,, ... | 1,789 | 276 | 503 | 99·93 | 21·46 | 34·86 | ... | ... | ... |
| 66 | Warah ... ... ... ,, ... | 1,435 | 167 | 373 | 99·90 | 15·73 | 32·28 | ... | ... | ... |
| 67 | Dokri ... ... ... ,, ... | 2,756 | 176 | 975 | 100·00 | 9·88 | 16·98 | ... | ... | ... |
| 68 | Shahdadkot ... ... ... ,, ... | 1,739 | 247 | 679 | 99·87 | 23·30 | 48·02 | ... | ... | ... |
| | Total, Larkana district ... | 18,399 | 2,116 | 7,204 | 99·90 | 18·90 | 29·84 | 12,927 | 13,885 | 0 14 11 |
| 69 | Shikarpur ... ... ... T. C. ... | 44 | 9 | 3 | 99·89 | 21·95 | 30·06 | ... | ... | ... |
| 70 | Do. ... ... ... R. C. ... | 92 | 3 | 47 | 100·00 | 6·67 | 30·92 | ... | ... | ... |
| 71 | Sukkur ... ... ... ,, ... | 90 | 12 | 51 | 100·00 | 30·77 | 21·82 | ... | ... | ... |
| 72 | Do. ... ... ... T. C. ... | 87 | 18 | 59 | 100·00 | 64·29 | 26·07 | ... | ... | ... |
| 73 | Rohri ... ... ... ,, ... | 6 | ... | 5 | 99·77 | ... | 25·98 | ... | ... | .. |
| 74 | Do. ... ... ... R. C. ... | 176 | ... | 130 | 100·00 | ... | 29·19 | ... | ... | ... |
| 75 | Garhi Yasin ... ... ... ,, ... | 200 | 8 | 90 | 100·00 | 7·27 | 25·83 | ... | ... | .. |
| 76 | Do. ... ... ... T. C. ... | 5 | 1 | ... | 100·00 | 20·00 | | | | |
| 77 | Ghotki ... ... ... ,, ... | 13 | ... | 13 | 100·00 | ... | 22·52 | ... | ... | ... |
| 78 | Do. ... ... ... R. C. ... | 49 | ... | 49 | 100·00 | ... | | | | |
| 79 | Mirpur Mathelo ... ... ... ,, ... | 20 | 2 | 4 | 100·00 | 12·50 | 26·11 | ... | ... | ... |
| 80 | Pano Akil ... ... ... ,, ... | 91 | 2 | 87 | 100·00 | 50·00 | 27·00 | ... | ... | ... |
| 81 | Ubauro ... ... ... ,, ... | 230 | 24 | 150 | 100·00 | 30·00 | 20·54 | ... | ... | ... |
| | Total, Sukkur district ... | 1,103 | 79 | 688 | 99·98 | 19·36 | 26·37 | 14,235 | 16,447 | 0 13 10 |
| 82 | Jacobabad ... ... ... R. C. ... | 239 | 7 | 75 | 99·90 | 4·27 | 14·62 | ... | ... | ... |
| 83 | Do. ... ... .. T. C. ... | 13 | 2 | 5 | 100·00 | 25·00 | 27·75 | ... | ... | ... |
| 84 | Garhi Khairo ... ... ... R. C. ... | 215 | 4 | 135 | 100·00 | 5·00 | ... | ... | ... | ... |
| 85 | Thul ... ... ... ,, ... | 113 | 10 | 15 | 99·86 | 10·20 | 34·19 | ... | ... | ... |
| 86 | Kandhkot ... ... ... ,, ... | 424 | 89 | 179 | 100 00 | 36·33 | 37·63 | ... | ... | ... |
| 87 | Kashmore ... ... ... ,, ... | 256 | 2 | 100 | 100·00 | 1·28 | 29·51 | ... | ... | ... |
| | Total, Upper Sind Frontier district ... | 1,260 | 114 | 509 | 99·95 | 15·18 | 32·28 | 6,771 | 8,316 | 0 13 0 |
| | Total, Sind ... | 73,605 | 7,261 | 32,098 | 99·91 | 17·49 | 35·75 | 1,13,384 | 1,38,946 | 0 13 6 |

## STATEMENT No. I.—*contd.*

| No. | Districts or Towns. | Population according to census of 1931. | Average number of Vaccinators employed throughout the year. | | Total number of persons vaccinated. Male. | Total number of persons vaccinated. Female. | Total number of persons vaccinated. Total. | Average number of persons vaccinated by each Vaccinator. | Primary Vaccination. Total. | Primary Vaccination. Successful. Under one year. | Primary Vaccination. Successful. One and under six years. | Primary Vaccination. Successful. Total of all ages. | Primary Vaccination. Unknown. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | Karachi district ... ... ... ... ... | 3,15,413 | 8 | P. | 5,791 | 4,534 | 10,325 | 1,540 | 10,325 | 2,617 | 5,909 | 9,607 | 706 |
| | | | | R. | 1,569 | 425 | 1,994 | | | | | | |
| 2 | Hyderabad ,, ... ... ... ... ... | 5,62,373 | 10 | P. | 11,529 | 8,980 | 20,509 | 2,768 | 20,509 | 5,895 | 11,290 | 18,928 | 1,580 |
| | | | | R. | 5,302 | 1,868 | 7,170 | | | | | | |
| 3 | Nawabshah ,, ... ... ... ... ... | 4,96,612 | 9 | P. | 9,036 | 7,974 | 17,010 | 2,252 | 17,010 | 8,337 | 6,938 | 15,810 | 1,198 |
| | | | | R. | 2,420 | 842 | 3,262 | | | | | | |
| 4 | Thar Parkar ,, ... ... ... ... ... | 4,64,199 | 12 | P. | 10,530 | 8,454 | 18,984 | 2,778 | 18,984 | 7,257 | 8,940 | 17,522 | 1,424 |
| | | | | R. | 10,002 | 4,354 | 14,356 | | | | | | |
| 5 | Larkana ,, ... ... ... ... ... | 4,38,558 | 7 | P. | 6,241 | 5,687 | 11,928 | 4,316 | 11,929 | 6,807 | 3,565 | 10,639 | 1,276 |
| | | | | R. | 12,035 | 6,252 | 18,287 | | | | | | |
| 6 | Dadu ,, ... ... ... ... ... | 3,36,693 | 7 | P. | 5,662 | 5,312 | 10,974 | 1,983 | 10,974 | 5,465 | 4,317 | 10,203 | 759 |
| | | | | R. | 2,148 | 761 | 2,909 | | | | | | |
| 7 | Sukkur ,, ... ... ... .. | 4,75,097 | 8 | P. | 6,915 | 6,644 | 13,559 | 1,813 | 13,559 | 8,860 | 3,119 | 12,061 | 1,498 |
| | | | | R. | 792 | 156 | 948 | | | | | | |
| 8 | Upper Sind Frontier ... ... ... ... ... | 2,38,796 | 5 | P. | 4,538 | 3,757 | 8,295 | 1,908 | 8,295 | 4,306 | 3,178 | 7,768 | 523 |
| | | | | R. | 1,000 | 247 | 1,247 | | | | | | |
| | Total Sind, excluding Towns ... | 33,27,741 | 66 | P. | 60,242 | 51,342 | 1,11,584 | 2,451 | 1,11,585 | 49,544 | 47,256 | 1,02,538 | 3,964 |
| | | | | R. | 35,268 | 14,905 | 50,173 | | | | | | |
| | KARACHI COLLECTORATE. | | | | | | | | | | | | |
| | Karachi ... ... ... ... T. C. .. | 2,54,031 | 6 | P. | 8,034 | 7,555 | 15,589 | 4,320 | 15,609 | 11,013 | 3,727 | 15,539 | 36 |
| | | | | R. | 6,422 | 3,909 | 10,331 | | | | | | |
| | Do. ... ... ... ... C. C. .. | ... | 1 | P. | 21 | 21 | 42 | 198 | 42 | 33 | 4 | 38 | 3 |
| | | | | R. | 149 | 7 | 156 | | | | | | |
| | Tatta ... ... ... ... T. C. ... | 9,635 | 1 | P. | 125 | 135 | 260 | 336 | 260 | 79 | 159 | 241 | 19 |
| | | | | R. | 53 | 23 | 76 | | | | | | |
| | Total ... | 2,63,666 | 8 | P. | 8,180 | 7,711 | 15,891 | 3,307 | 15,911 | 11,125 | 3,890 | 15,818 | 58 |
| | | | | R. | 6,624 | 3,939 | 10,563 | | | | | | |
| | HYDERABAD COLLECTORATE. | | | | | | | | | | | | |
| | Hyderabad ... ... ... ... T. C. .. | 96,021 | 1 | P. | 2,280 | 2,172 | 4,452 | 13,329 | 4,452 | 1,887 | 1,428 | 3,393 | 1,035 |
| | | | | R. | 5,282 | 3,595 | 8,877 | | | | | | |
| | Do. ... ... ... ... C. C. ... | 4,530 | 1 | P. | 62 | 58 | 120 | 194 | 120 | 56 | 45 | 102 | 18 |
| | | | | R. | 36 | 38 | 74 | | | | | | |
| | Hala ... ... ... ... ... T. C. ... | 7,304 | ... | P. | 133 | 102 | 235 | ... | 235 | 149 | 81 | 231 | 4 |
| | | | | R. | 17 | 1 | 18 | | | | | | |
| | Matiari ... ... ... ... ,, ... | 6,074 | ... | P. | 102 | 89 | 191 | ... | 191 | 49 | 128 | 185 | 5 |
| | | | | R. | 18 | 10 | 28 | | | | | | |
| | Nasarpur ... ... ... ... ,, ... | 4,243 | ... | P. | 41 | 37 | 78 | ... | 78 | 18 | 59 | 78 | ... |
| | | | | R. | ... | 1 | ... | | | | | | |
| | Tando Allahyar ... ... ... ... ,, ... | 5,146 | ... | P. | 105 | 89 | 194 | ... | 194 | 43 | 118 | 183 | 11 |
| | | | | R. | 157 | 66 | 223 | | | | | | |
| | Tando Muhammadkhan ... ... ... ,, .. | 6,560 | ... | P. | 170 | 161 | 331 | ... | 331 | 118 | 173 | 319 | 12 |
| | | | | R. | 408 | 136 | 544 | | | | | | |
| | Total | 1,29,878 | 2 | P. | 2,893 | 2,708 | 5,601 | 7,683 | 5,601 | 2,320 | 2,032 | 4,491 | 1,085 |
| | | | | R. | 5,918 | 3,846 | 9,764 | | | | | | |
| | NAWABSHAH COLLECTORATE. | | | | | | | | | | | | |
| | Tando Adam ... ... ... ... T. C. ... | 12,859 | ... | P. | 676 | 622 | 1,298 | ... | 1,298 | 546 | 521 | 1,174 | 124 |
| | | | | R. | 586 | 321 | 907 | | | | | | |
| | Shahdadpur ... ... ... ... ,, ... | 7,572 | ... | P. | 225 | 221 | 446 | ... | 446 | 190 | 179 | 401 | 45 |
| | | | | R. | 31 | 13 | 44 | | | | | | |
| | Total ... | 20,431 | ... | P. | 901 | 843 | 1,744 | ... | 1,744 | 736 | 700 | 1,575 | 169 |
| | | | | R. | 617 | 334 | 951 | | | | | | |
| | THAR PARKAR COLLECTORATE. | | | | | | | | | | | | |
| | Umarkot ... .. ... ... T. C. ... | 3,581 | ... | P. | 139 | 99 | 238 | ... | 238 | 82 | 116 | 218 | 20 |
| | | | | R. | 175 | 185 | 260 | | | | | | |
| | Mirpurkhas ... ... ... ... ,, ... | 9,120 | ... | P. | 332 | 303 | 635 | ... | 635 | 242 | 324 | 617 | 18 |
| | | | | R. | 548 | 167 | 715 | | | | | | |
| | Total ... | 12,701 | ... | P. | 471 | 402 | 873 | ... | 873 | 324 | 440 | 835 | 38 |
| | | | | R. | 723 | 252 | 975 | | | | | | |

STATEMENT No. I—*contd*

| No. | Districts or Towns. | Re-vaccination. Total. | Re-vaccination. Successful. | Re-vaccination. Unknown. | Percentage of successful cases in which the results were known. Primary. | Percentage of successful cases in which the results were known. Re-vaccination. | Persons Successfully vaccinated per 1,000 of population. | Total cost of Vaccination Department | Number of all successful vaccinations performed by the vaccination staff only. | Average cost of each successful case performed by the vaccination staff. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | | | | | | Rs. a. p. | | Rs. a. p. |
| 1 | Karachi district ... ... ... ... | 1,994 | 303 | 508 | 99·88 | 20·39 | 31·42 | ... | 9,910 | ... |
| 2 | Hyderabad ,, ... ... ... .. | 7,170 | 554 | 1,832 | 99·99 | 10·38 | 34·64 | ... | 19,492 | .. |
| 3 | Nawabshah ,, ... ... ... ... | 3,262 | 456 | 715 | 99·99 | 17·90 | 32·76 | ... | 16,266 | ... |
| 4 | Thar Parkar ,, ... ... ... ... | 14,356 | 1,816 | 5,993 | 99·78 | 21·71 | 41·66 | ... | 19,338 | ... |
| 5 | Larkana ,, ... ... ... ... | 18,287 | 2,109 | 7,141 | 99·88 | 18·92 | 29·07 | ... | 12,748 | ... |
| 6 | Dadu ,, ... ... ... ... | 2,209 | 213 | 605 | 99 88 | 9·24 | 30·94 | ... | 10,416 | .. |
| 7 | Sukkur ,, ... ... ... ... | 948 | 51 | 608 | 100·00 | 15·00 | 25·49 | ... | 12,112 | ... |
| 8 | Upper Sind Frontier ... ... ... ... | 1,247 | 112 | 504 | 99·95 | 15·07 | 33·00 | ... | 7,880 | ... |
| | Total, Sind, excluding Towns .. | 50,173 | 5,614 | 17,906 | 99·92 | 17·40 | 32·80 | ... | 1,08,152 | ... |
| | KARACHI COLLECTORATE. | | | | | | | | | |
| | Karachi ... ... ... ... T. C ... | 10,331 | ... | 10,331 | 99·91 | ... | 61·17 | ... | 15,539 | ... |
| | Do. ... ... ... ... C. C. ... | 156 | 37 | 2 | 97·44 | 24·03 | ... | ... | 75 | ... |
| | Tatta ... ... ... ... T. C. ... | 76 | 33 | 27 | 100·00 | 67·55 | 28·54 | ... | 274 | ... |
| | Total ... | 10,563 | 70 | 10,360 | 99·91 | 34·48 | 60·26 | ... | 15,883 | ... |
| | HYDERABAD COLLECTORATE. | | | | | | | | | |
| | Hyderabad ... ... ... ... T. C. ... | 8,877 | 1,222 | 2,504 | 99·30 | 19·17 | 48·06 | ... | 4,615 | ... |
| | Do. ... ... ... ... C. C. ... | 74 | 70 | ... | 100·00 | 94·59 | 37·97 | ... | 172 | ... |
| | Hala ... ... ... ... T. C ... | 18 | 1 | 14 | 100·00 | 25·00 | 31·76 | ... | 232 | ... |
| | Matiari ... ... ... ... ,, ... | 28 | 1 | ... | 99·46 | 3·57 | 30·62 | ... | 186 | ... |
| | Nasarpur ... ... ... ... ,, ... | ... | ... | ... | 100·00 | ... | 18·38 | ... | 78 | ... |
| | Tando Allahyar ... ... ... ,, .. | 223 | 6 | 61 | 100 00 | 3·70 | 36·73 | ... | 189 | ... |
| | Tando Muhammadkhan ... ... ,, .. | 554 | 41 | 189 | 100·00 | 11·55 | 54·88 | .. | 360 | ... |
| | Total ... | 9,764 | 1,341 | 2,768 | 99·45 | 19·17 | 44·90 | ... | 5,832 | ... |
| | NAWABSHAH COLLECTORATE. | | | | | | | | | |
| | Tando Adam .. ... ... ... T. C. ... | 907 | 122 | 285 | 100·00 | 19·61 | 100·79 | ... | 1,296 | ... |
| | Shahdadpur ... ... ... .. ,, ... | 44 | 3 | ... | 100·00 | 6·82 | 53·35 | ... | 404 | ... |
| | Total ... | 951 | 125 | 285 | 100·00 | 18·77 | 83·21 | ... | 1,700 | ... |
| | THAR PARKAR COLLECTORATE. | | | | | | | | | |
| | Umarkot ... ... ... ... T. C. ... | 260 | 45 | 285 | 100·00 | 20·93 | 68·47 | ... | 263 | ... |
| | Mirpurkhas ... ... ... ... ,, ... | 715 | 8 | ... | 100·00 | 4·44 | 68·53 | ... | 625 | ... |
| | Total ... | 975 | 53 | 285 | 100·00 | 13·44 | 69·92 | ... | 888 | ... |

L (IV) 2015—19

STATEMENT No. I.—*contd.*

| No. | District or Towns. | Population according to census of 1931. | Average number of Vaccinators employed throughout the year. | | Total number of persons vaccinated. Male. | Female. | Total. | Average number of vaccinated by each Vaccinator | Primary Vaccination. Total. | Successful. Under one year. | One and under six years. | Total of all ages. | Unknown. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | **LARKANA COLLECTORATE.** | | | | | | | | | | | | |
| | Larkana ... ... ... ... T. C. ... | 26,841 | 1 | P. | 360 | 258 | 618 | 643 | 618 | 152 | 426 | 579 | 39 |
| | | | | R. | 19 | 6 | 25 | | | | | | |
| | Kambar ... ... ... ... " ... | 9,717 | 1 | P | 185 | 157 | 342 | 356 | 345 | 190 | 97 | 287 | 56 |
| | | | | R. | 5 | 9 | 14 | | | | | | |
| | Ratodero ... ... ... ... " ... | 7,285 | ... | P. | 153 | 126 | 279 | ... | 279 | 229 | 34 | 264 | 15 |
| | | | | R. | 65 | 8 | 73 | | | | | | |
| | Total ... | 43,843 | 2 | P. | 698 | 541 | 1,239 | 676 | 1,240 | 571 | 557 | 1,130 | 110 |
| | | | | R. | 89 | 23 | 112 | | | | | | |
| | **DADU COLLECTORATE.** | | | | | | | | | | | | |
| | Dadu ... ... ... ... ... T. C. ... | 6,562 | ... | P. | 103 | 93 | 196 | ... | 196 | 76 | 106 | 185 | 11 |
| | | | | R. | 85 | 3 | 89 | | | | | | |
| | Sehwan ... ... ... ... " ... | 4,107 | ... | P. | 75 | 68 | 143 | ... | 143 | 54 | 69 | 133 | 10 |
| | | | | R. | 6 | 4 | 10 | | | | | | |
| | Kotri ... ... ... ... ... " ... | 10,033 | ... | P. | 116 | 107 | 223 | ... | 223 | 78 | 109 | 211 | 12 |
| | | | | R. | 584 | 157 | 741 | | | | | | |
| | Manjhand ... ... ... ... " ... | 2,746 | ... | P. | 17 | 16 | 33 | ... | 33 | 13 | 13 | 28 | 5 |
| | | | | R. | 44 | 15 | 59 | | | | | | |
| | Total ... | 23,448 | ... | P. | 311 | 281 | 595 | ... | 595 | 221 | 297 | 557 | 38 |
| | | | | R. | 720 | 179 | 899 | | | | | | |
| | **SUKKUR COLLECTORATE.** | | | | | | | | | | | | |
| | Sukkur ... ... ... ... T. C. ... | 69,277 | 1 | P. | 973 | 878 | 1,851 | 1,938 | 1,851 | 895 | 893 | 1,788 | 63 |
| | | | | R. | 62 | 25 | 87 | | | | | | |
| | Shikarpur ... ... ... ... " ... | 62.505 | 1 | P | 970 | 943 | 1,913 | 1,957 | 1,913 | 1,483 | 395 | 1,880 | 31 |
| | | | | R. | 39 | 5 | 44 | | | | | | |
| | Rohri ... ... ... ... " ... | 16,900 | 1 | P. | 245 | 216 | 461 | 467 | 461 | 285 | 152 | 439 | 21 |
| | | | | R. | 5 | 1 | 6 | | | | | | |
| | Garhi Yasin ... ... ... ... " ... | 6,925 | ... | P. | 100 | 87 | 187 | ... | 187 | 155 | 17 | 172 | 15 |
| | | | | R, | 4 | 1 | 5 | | | | | | |
| | Ghotki ... ... ... ... " ... | 4,638 | ... | P. | 19 | 14 | 33 | ... | 33 | 17 | 11 | 28 | 5 |
| | | | | R. | 10 | 3 | 13 | | | | | | |
| | Total ... | 1,60,245 | 3 | P. | 2,307 | 2,138 | 4,445 | 1,533 | 4,445 | 2,835 | 1,468 | 4,307 | 135 |
| | | | | R. | 120 | 35 | 155 | | | | | | |
| | **UPPER SIND FRONTIER COLLECTORATE.** | | | | | | | | | | | | |
| | Jacobabad ... ... ... ... T. C. ... | 15,748 | 1 | P. | 234 | 202 | 436 | 449 | 436 | 296 | 135 | 434 | 2 |
| | | | | R. | 7 | 6 | 13 | | | | | | |
| | Total ... | 15,748 | 1 | P. | 234 | 202 | 436 | 449 | 436 | 296 | 135 | 434 | 2 |
| | | | | R. | 7 | 6 | 13 | | | | | | |
| | Total, Towns ... | 6,69,960 | 16 | P. | 15,995 | 14,829 | 30,816 | 3,391 | 30,845 | 18,428 | 9,510 | 29,147 | 1,635 |
| | | | | R. | 14,818 | 8,614 | 23,432 | | | | | | |
| | Inspector's cost ... ... ... ... ... | ... | ... | | ... | ... | ... | ... | ... | ... | ... | ... | .. |
| | Total, Sind ... | 38,87,070 | 82 | P. | 76,237 | 66,171 | 1,42,408 | 2,634 | 1,42,430 | 67,972 | 56,775 | 1,31,685 | 10,599 |
| | | | | R. | 50,086 | 23,5,9 | 73,605 | | | | | | |

## Statement No. I—*contd.*

| No. | Districts or Town. | Re-vaccination. Total. | Re-vaccination. Successful | Re-vaccination. Unknown. | Percentage of successful cases in which the results were known. Primary. | Percentage of successful cases in which the results were known. Re-vaccination. | Persons successfully vaccinated per 1,000 of population. | Total cost of Vaccination Department. | Number of all successful vaccinations performed by the vaccination staff only. | Average cost of each successful case performed by the vaccination staff. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | | | | | | Rs. a p. | | Rs. a. p. |
| | **Larkana Collectorate.** | | | | | | | | | |
| | Larkana ... ... ... T. C. ... | 25 | ... | 24 | 100·00 | ... | 21·57 | ... | 579 | ... |
| | Kambar ... ... ... ,, ... | 14 | 4 | 1 | 100·03 | 30·77 | 29,95 | ... | 291 | ... |
| | Ratodero ... ... ... ,, ... | 73 | 3 | 38 | 100·00 | 8·57 | 36,79 | ... | 267 | ... |
| | Total ... | 112 | 7 | 63 | 100·09 | 14·30 | 25·93 | ... | 1,137 | ... |
| | **Dadu Collectorate.** | | | | | | | | | |
| | Dadu ... ... ... T. C. ... | 89 | 9 | 37 | 100·00 | 17·31 | 29·56 | ... | 194 | ... |
| | Sehwan ... ... ... ,, ... | 10 | 2 | 6 | 100·00 | 50·00 | 22·87 | ... | 135 | ... |
| | Kotri ... ... ... ... ,, ... | 741 | 8 | ... | 100·00 | 1·71 | 2·19 | ... | 219 | ... |
| | Manjhand ... ... ... ... ,, ... | 59 | 2 | 8 | 100·00 | 3·92 | 10·92 | ... | 30 | ... |
| | Total ... | 899 | 21 | 51 | 100·00 | 2·48 | 24·65 | ... | 578 | ... |
| | **Sukkur Collectorate.** | | | | | | | | | |
| | Sukkur ... ... ... T. C. ... | 87 | 18 | 59 | 100·00 | 64·29 | 26·07 | ... | 1,806 | ... |
| | Shikarpur ... ... ... ,, ... | 44 | 9 | 3 | 99·89 | 21·95 | 30·06 | ... | 1,889 | ... |
| | Rohri ... ... ... ,, ... | 6 | ... | 5 | 99·77 | ... | 25·98 | ... | 439 | ... |
| | Garhi Yasin ... ... ... ,, ... | 5 | 1 | ... | 100·00 | 20·00 | 24·12 | ... | 173 | ... |
| | Ghotki ... ... ... ,, ... | 13 | ... | 13 | 100·00 | ... | 6·08 | ... | 28 | ... |
| | Total ... | 155 | 28 | 80 | 99·93 | 37·33 | 21·44 | ... | 4,335 | ... |
| | **Upper Sind Frontier Collectorate.** | | | | | | | | | |
| | Jacobabad ... ... ... ... T. C. ... | 13 | 2 | 5 | 100·00 | 25·00 | 27·75 | ... | 436 | ... |
| | Total ... | 13 | 2 | 5 | 100·00 | 25·00 | 27·75 | ... | 436 | ... |
| | Total, Towns ... | 23,432 | 1,647 | 14,192 | 99·86 | 17·82 | 45·95 | ... | 30,794 | ... |
| | Inspector's cost ... ... ... .. | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Total, Sind ... | 73,605 | 7,261 | 32,098 | 99·91 | 17·49 | 35·75 | ... | 1,38,946 | ... |

STATEMENT No. I—*contd.*

| No | Districts or Towns. | Population according to census of 1931. | Average number of Vaccinators employed throughout the year. | | Total number of persons vaccinated. | | | Average number of vaccinated by each Vaccinator | Primary Vaccination. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Male. | Female. | Total. | | Total. | Successful. | | | Unknown. |
| | | | | | | | | | | Under one year. | One and under six years. | Total of all ages. | |
| 1 | 2 | 3 | 4 | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | **By Special Staff.** | | | | | | | | | | | | |
| | Local Boards ... ... ... ... ... | 33,27,741 | 66 | P.<br>R. | 60,242<br>35,268 | 51,342<br>14,905 | 1.11,584<br>50,173 | 2,451 | 1,11,585 | 49,544 | 47,256 | 1,02,538 | 8,964 |
| | Municipalities ... ... ... ... ... | 5,54,799 | 14 | P.<br>R. | 15,912<br>14,633 | 14,750<br>8,569 | 30.662<br>23,202 | 3,847 | 30,683 | 18,339 | 9,470 | 29,007 | 1,614 |
| | Cantonments ... ... ... ... ... | 4,530 | 2 | P.<br>R. | 83<br>185 | 79<br>45 | 162<br>230 | 196 | 162 | 89 | 49 | 140 | 21 |
| | Total, Sind ... | 38,87,070 | 82 | P.<br>R. | 76,237<br>50,086 | 66,171<br>23,519 | 1,42,408<br>73,605 | 2,634 | 1,42,430 | 67,972 | 56,775 | 1,31,685 | 10,599 |
| | By Dispensary Staff ... ... ... ... | ... | ... | P.<br>R. | 137<br>5,916 | 14<br>66 | 151<br>5,982 | ... | 151 | 6 | 22 | 136 | 9 |
| | By Railway Staff ... ... ... ... | .. | ... | P.<br>R. | 156<br>519 | 84<br>154 | 240<br>673 | ... | 240 | 125 | 50 | 204 | 20 |
| | Private Medical Practitioners ... ... ... ... | ... | ... | P.<br>R. | 218<br>472 | 189<br>205 | 407<br>677 | ... | 407 | 35 | 53 | 105 | 302 |
| | Total ... | ... | ... | P.<br>R. | 511<br>6,907 | 287<br>425 | 798<br>7,332 | ... | 798 | 166 | 125 | 445 | 331 |
| | Grand Total ... | 38,87,070 | 82 | P.<br>R. | 76,748<br>56,993 | 66,458<br>23,944 | 1.43,206<br>80,937 | 2,733 | 1,43,228 | 68,138 | 56,900 | 1,32,130 | 10,930 |

STATEMENT No.—*contd.*

| No. | Districts or Town. | Re-vaccination. Total. | Re-vaccination. Successful | Re-vaccination. Unknown. | Percentage of successful cases in which the results were known. Primary. | Percentage of successful cases in which the results were known. Re-vaccination. | Persons successfully vaccinated per 1,000 of population. | Total cost of Vaccination Department. | Number of all successful vaccinations performed by the vaccination staff only. | Average cost of each successful case performed by the vaccination staff. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | | | | | | Rs. a. p. | | Rs. a. p. |
| | By Special Staff. | | | | ... | ... | ... | ... | ... | |
| | Local Boards ... ... ... ... .. | 50,173 | 5,614 | 17,906 | 99·92 | 17·40 | 32·50 | ... | 1,08,152 | ... |
| | Municipalities ... ... ... ... ... | 23,202 | 1,540 | 14,190 | 99·86 | 17·09 | 55·06 | ... | 30,547 | ... |
| | Cantonments ... ... ... ... . | 230 | 107 | 2 | 99·29 | 46·93 | 54·75 | ... | 247 | ... |
| | Total, Sind .. | 73,605 | 7,261 | 32,098 | 99·91 | 17·49 | 35·75 | ... | 1,38,946 | ... |
| | By Dispensary Staff ... ... ... | 5,982 | 5,159 | 52 | 95·77 | 87·00 | ... | ... | 5,295 | ... |
| | By Railway Staff ... ... ... | 673 | 531 | 96 | 92·73 | 92·03 | ... | ... | 735 | ... |
| | Private Medical Practitioners ... ... ... | 677 | 28 | 556 | 100·00 | 23·14 | ... | ... | 133 | ... |
| | Total ... | 7,332 | 5,718 | 704 | 95·29 | 86·27 | ... | ... | 6,163 | ... |
| | GRAND TOTAL ... | 80,937 | 12,979 | 32,802 | 99·89 | 26·96 | 37·33 | ... | 1,45,109 | ... |

## STATEMENT No. I.—*contd.*

### Summary.

| — | Total number of persons vaccinated. | | Total number of operations performed. | | Percentage of successful cases in which results were known. | |
|---|---|---|---|---|---|---|
| | Primary. | Re-vaccination. | Primary. | Re-vaccination. | Primary. | Re-vaccination. |
| By Special Staff ... ... | ... | ... | ... | ... | ... | ... |
| Districts excluding towns ... | 1,11,584 | 50,173 | 1,11,585 | 50,173 | 99·92 | 17·40 |
| Towns ... ... ... | 30,662 | 23,202 | 30,683 | 23,202 | 99·86 | 17·09 |
| Cantonments ... ... ... | 162 | 230 | 162 | 230 | 99·29 | 46·93 |
| Total ... | 1,42,408 | 73,605 | 1,42,430 | 73,605 | 99·91 | 17·49 |

| Average number of persons vaccinated by each vaccinator. | | Number of children successfully vaccinated. | | Ratio of successful vaccinations per 1,000 of population. | Total cost of department. | Number of all successful vaccinations performed. | Average cost of each successful case. |
|---|---|---|---|---|---|---|---|
| Vaccinators employed. | Persons vaccinated by each vaccinator. | Under one year. | One and under six years. | | | | |
| | | | | | Rs. a. p. | | Rs. a. p. |
| ... | ... | ... | ... | ... | ... | ... | ... |
| 66 | 2,451 | 49,544 | 47,256 | 32·80 | ... | 1,08,152 | ... |
| 14 | 3,847 | 18,339 | 9,470 | 55·06 | ... | 30,547 | ... |
| 2 | 196 | 89 | 49 | 54·75 | ... | 247 | ... |
| [illegible] | 2,634 | 67,972 | 56,775 | 35·75 | ... | 1,38,946 | ... |



## STATEMENT No. I.—*concld.*

### Summary.

| — | Total number of persons vaccinated. | | Total number of operations performed. | | Percentage of successful cases in which results were known. | |
|---|---|---|---|---|---|---|
| | Primary. | Re-vaccination. | Primary. | Re-vaccination. | Primary. | Re vaccination. |
| By Dispensary Staff ... ... | 151 | 5,982 | 151 | 5,982 | 95·77 | 87·00 |
| By private Medical Practitioners ... | 407 | 677 | 407 | 677 | 100·00 | 23·14 |
| By Railway Dispensaries ... ... | 240 | 673 | 240 | 673 | 92·73 | 92·03 |
| Total ... | 798 | 7,332 | 798 | 7,332 | 95·29 | 86·27 |
| GRAND TOTAL ... | 143,206 | 80,937 | 143,228 | 80,937 | 99·89 | 26·96 |

| Average number of persons vaccinated by each vaccinator. | | Number of children successfully vaccinated. | | Ratio of successful vaccinations per 1,000 of population. | Total cost of Department. | Number of all successful vaccinations performed. | Average cost of each successful case. |
|---|---|---|---|---|---|---|---|
| Vaccinators employed. | Persons vaccinated by each vaccinator. | Under one year. | One and under six years. | | | | |
| | | | | | Rs. a. p. | | Rs. a. p. |
| ... | ... | 6 | 22 | ... | ... | 5,295 | ... |
| ... | ... | 35 | 53 | ... | ... | 133 | ... |
| ... | ... | 125 | 50 | ... | ... | 735 | ... |
| ... | ... | 166 | 125 | ... | ... | 6,163 | ... |
| 82 | 2,734 | 68,138 | 56,900 | 37·33 | ... | 145,109 | ... |

# APPENDIX No. IV.—*concld.*

## *Vaccination Return.*

Statement No. II, showing the number of persons primarily vaccinated in each of the undermentioned official years. vaccinated and the number of those persons who were successfully

PERSONS PRIMARILY VACCINATED.

YEARS ENDED ON 31ST MARCH.

| Establishments. | 1930-31. Total Number. | 1930-31. Number successfully vaccinated. | 1931-32. Total Number. | 1931-32. Number successfully vaccinated. | 1932-33. Total Number. | 1932-33. Number successfully vaccinated. | 1933-34. Total Number. | 1933-34. Number successfully vaccinated. | 1934-35. Total number | 1934-35. Number successfully vaccinated. |
|---|---|---|---|---|---|---|---|---|---|---|
| Government .. | ... | ... | ... | ... | ... | ... | | ... | ... | ... |
| Municipality ... | 16,384 | 14,174 | 18,431 | 15,463 | 21,469 | 17,558 | 19,004 | 15,180 | 21,334 | 17,791 |
| Local Funds ... | 82,644 | 78,09 | 87,024 | 80,316 | 94,804 | 89,650 | 88,707 | 83,569 | 90,698 | 84,656 |
| Cantonment ... | 84 | 83 | 118 | 116 | 91 | 91 | 62 | 62 | 139 | 139 |
| Native States ... | 5,065 | 4,928 | 5,649 | 5,502 | 6,352 | 6,215 | 6,579 | 6,459 | 6,406 | 6,257 |
| Dispensaries ... | 1,218 | 965 | 771 | 606 | 1,747 | 1,398 | 841 | 620 | 334 | 276 |
| Army ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... |
| Europeans ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Natives ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... |
| Total ... | 1,50,395 | 98,246 | 1,11,993 | 1,02,003 | 1,24,463 | 1,14,912 | 1,15,193 | 1,05,890 | 1,18,911 | 1,09,119 |

| Establishments. | 1935-36. Total Number. | 1935-36. Number successfully vaccinated. | 1936-37. Total Number | 1936-37. Number successfully vaccinated. | 1937-38. Total Number. | 1937-38. Number successfully vaccinated. | 1938-39. Total Number. | 1938-39. Number successfully vaccinated. | 1939-40. Total Number | 1939-40. Number successfully vaccinated. |
|---|---|---|---|---|---|---|---|---|---|---|
| Government .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Municipality ... | 22,395 | 18,926 | 22,986 | 20,775 | 30,684 | 28,699 | 27,395 | 26,228 | 30,662 | 29,007 |
| Local Funds ... | 96,412 | 89,768 | 1,00,045 | 93,120 | 1,07,655 | 99,071 | 1,08,846 | 1,00,218 | 1,11,584 | 1,02,538 |
| Cantonment ... | 60 | 60 | 131 | 121 | 198 | 161 | 226 | 221 | 162 | 140 |
| Native States ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Dispensaries ... | 521 | 455 | 499 | 461 | 683 | 510 | 494 | 425 | 798 | 445 |
| Army ... | ... | | ... | ... | ... | ... | ... | ... | ... | .. |
| Europeans ... | . | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Natives ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total ... | 1,19,388 | 1,09,209 | 1,23,661 | 1,14,477 | 1,39,220 | 1,28,441 | 1,36,961 | 1,27,092 | 1,43,205 | 1,82,130 |

L (IV) 2015—21 KARACHI: PRINTED AT THE GOVERNMENT PRESS